December 10

WS-1 Innate lymphocytes-1: Innate lymphoid cells (NK, ILC1, ILC2, ILC3)

1-B-WS1-1-O/P

GITR signaling regulates intestinal inflammation by suppressing NK cells function in DSS-induced colitis model

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1-B-WS1-2-P

Anti-metastatic effect of thalidomide through the regulation of NK cell homeostasis

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1-B-WS1-3-O/P

Local IL-15 dependency of liver-resident ILC1

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1-B-WS1-4-P

The role of group 2 innate lymphoid cells in pulmonary fibrosis

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1-B-WS1-5-O/P

β2 adrenergic receptor-mediated negative regulation of group 2 innate lymphoid cell responses

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1-B-WS1-6-O/P

Group2 innate lymphoid cells regulate susceptibility to allergic lung inflammation via an innate amplification circuit driven by IL-4

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1-B-WS1-7-P

Novel suppression mechanism of group 2 innate lymphoid cells

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1-B-WS-1-8-P

GITR co-signaling controls group 2 innate lymphoid cells through IL-9 induction in allergic lung inflammation

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1-B-WS1-9-P

IL-5-producing ILC2 plays a pivotal role in papain-induced rhinitis

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1-B-WS1-10-P

Characterization of ILC2 in IL-33-induced chronic inflammation

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1-B-WS1-11-O/P

A RORγt-dependent innate lymphoid cell-type in secondary lymphoid organs expresses Aire and presents endogenously expressed antigen for T cell tolerance

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1-B-WS1-12-O/P

Infants breastfed with milk containing high saturated fatty acids is associated with risk of atopic dermatitis development via an involvement of ILCs

WengSheng KONG[1,3)], Hiroko INOUE[1)], Yun GUO[1)], Sho MOKUDA[1)], Naoki SHIMOJO[2)], Masamoto KANNO[1,3)]

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1-B-WS1-13-O/P

Fundamental role of LTi-like cell in the maintenance of adult intestinal homeostasis

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1-B-WS1-14-P

Oxidative-stress responder Nrf2 regulates intestinal inflammation by attenuating the IL-22-producing NKp46^{+} ILC3 cells

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December 10

WS-2 Innate lymphocytes-2: Innate T lymphocytes (NKT, MAIT, and γ δ T cells)

1-B-WS2-1-O/P

Constitutive CD8 expression during thymocyte development drives differentiation of innate-like CD8^{+} T cell and NKT2 subset

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1-B-WS2-2-O/P

Pivotal role of protein kinase D in innate-like T cell development

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1-B-WS2-3-O/P

The characterization of long-lived memory like iNKT cells

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1-B-WS2-4-P

NKT cells control insulin sensitivity by interacting with adipocytes and macrophages

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1-B-WS2-5-P

Modulation of NKT-cell function in mice fed on high fat diet (HFD)

Koji Hane, Masashi Satoh, Kazuya Iwabuchi

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1-B-WS2-6-P

CD1d-positive antigen-presenting cells in the heart

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1-B-WS2-7-P

Amelioration of relapse model of experimental autoimmune uveoretinitis with NKT cell ligand

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1-B-WS2-8-O/P

MAIT cells as a new therapeutic target for systemic lupus erythematosus

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1-B-WS2-9-O/P

The search for molecules that activate mucosal associated invariant T cells in humans

Aisa Fujiwara[1)], Kensuke Shibata[1,2)], Eri Ishikawa[2,3)], Chihiro Motozono[2,3)], Sho Yamasaki[2,3,4)], Kohei Sonoda[1)]

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1-B-WS2-10-P

The protective role of MR1/MAIT cell in allergic contact dermatitis

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1-B-WS2-11-O/P

Characteristics of Vγ6$^+$ $\gamma\delta$ T cells in mice using novel antibody specific for Vγ6 chain

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December 10

WS-3 Hematopoiesis and Immune Environment-1

1-C-WS3-1-O/P

Non-canonical PRC1.1 is required for specification of hematopoietic progenitor cells toward B lymphoid lineage

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1-C-WS3-2-O/P

Epigenetic mechanisms for the repression of myeloid potential in T cell progenitors

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1-C-WS3-3-O/P

Regnase-1 and Regnase-3 regulate cell fate of early lymphoid progenitors in the bone marrow

Takuya Uehata[1)], Daisuke Ori[2)], Masaki Miyazaki[1)], Hiroshi Kawamoto[1)], Osamu Takeuchi[1)]

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1-C-WS3-4-P

Yolk sac progenitors for tissue-resident macrophages

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1-C-WS3-5-P

The contribution of TET1 to the maintenance of the hematopoietic capacity in hematopoietic stem cell-containing clusters in the dorsal aorta in midgestation mouse embryo

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1-C-WS3-6-P

Stable lines and clones of long-term proliferating normal, genetically unmodified murine commonlymphoid progenitors

Yohei Kawano[1)], Georg Petkau[2)], Christina Stehle[2)], Pawel Durek[2)], Gitta Anne Heinz[2)], Kousuke Tanimoto[3)], Hajime Karasuyama[1)], Mir-Farzin Mashreghi[2)], Chiara Romagnani[2)], Fritz Melchers[2)]

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1-C-WS3-7-P

Synergistic transactivation of hSIE by STAT4/STAT3 heterodimer in MT-2 cells

Noriaki Kitamura[1,2)], Takehiro Higashi[1)], Mengyue Shen[2)], Duo Wang[2)], Kentaro Morita[2)], Tamotsu Kanazawa[2)], Junichi Tsukada[1)], Yasuhiro Yoshida[2)]

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1-C-WS3-8-P

In vivo imaging of immune cells using transgenic zebrafish

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1-C-WS3-9-P

Intravital imaging analysis for the sympathetic neuronal activity and its regulation of immune cells

Tomoka Ao, Junichi Kikuta, Masaru Ishii

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1-C-WS3-10-O/P

Stem cell niche-specific Ebf3 maintains the bone marrow cavity

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1-C-WS3-11-O/P

Hematopoietic cell-derived IL-15 supports the development and maintenance of NK, NKT and memory CD8 T cells in bone marrow

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1-C-WS3-12-O/P

The role of fetal osteoclast inducer cells in perinatal bone marrow development

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1-C-WS3-13-O/P

$CD150^{high}$ Bone Marrow Tregs Maintain Hematopoietic Stem Cell Quiescence and Immune Privilege via Adenosine

Yuichi Hirata[1)], Hao Wei Li[1)], Sandra Pinho[2)], Lei Ding[3)], Simon C Robson[4)], Paul S Frenette[2)], Joji Fujisaki[1,3)]

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1-C-WS3-14-P

CXCL12-expressing bone marrow stromal cells express adiponectin and are targeted by Adipoq-Cre transgene

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1-C-WS3-15-P

Presence of SCF/CXCL12 double positive cells in the hematopoietic stem cell niche of cutaneous extramedullary hematopoiesis

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December 10

WS-4 Hematopoiesis and Immune Environment-2

1-C-WS4-1-O/P

Functional analyses of cortical thymic epithelial cells in NF-κB-inducing kinase (NIK)-mutated, *alymphoplasia* mice

Koji Eshima, Kazuya Iwabuchi

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1-C-WS4-2-P

Thymopoiesis regulates the clonogenic activity of thymic epithelial cells

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1-C-WS4-3-O/P

Characterization of thymic fibroblast subsets

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1-C-WS4-4-O/P

Analysis of the role of thymic APCs and Aire in the production of thymic Tregs

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1-C-WS4-5-P

Dependency of thymic dendritic cell maturation on RANK and CD40 signaling

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1-C-WS4-6-P

Depletion of Neural Crest-derived cells leads to reduction of plasama noradrenalin and alters T lymphopoiesis

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1-C-WS4-7-P

Impacts of space flight and its ground models on the thymus

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1-C-WS4-8-O/P

The spleen serves as a specific microenvironment that support development of B-1a cells and LAG-3$^+$ CD138$^+$ natural regulatory plasma cells

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1-C-WS4-9-O/P

SIRPα$^+$ dendritic cells regulate organization of lymph node stromal cells *in vivo*

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1-C-WS4-10-O/P

The role of MD-1 in S1P-mediated peripheral leukocyte circulation

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1-C-WS4-11-O/P

Live imaging of the allogeneic T cell rejection in secondary lymphoid organs

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1-C-WS4-12-P

Abnormality in the splenic microenvironment is involved in the malignant transformation of acute myeloid leukemia

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1-C-WS4-13-P

Transcription factor Tlx1 is involved in the postnatal splenic architectural maintenance in a non-cell autonomous manner

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1-C-WS4-14-P

Transcription factor Tlx1 regulates a niche for innate-like B cells in the spleen

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1-C-WS4-15-P

An attempt to detect follicular dendritic cells in ectopic lymphoid tissues

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1-C-WS4-16-P

DRC is a distinct subset of fibroblastic stromal cells construct the cortex-medulla boundary subcompartment and perform specific function in lymph node

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1-C-WS4-17-P

Conditional inactivation of canonical NF-κB activity in the fibroblastic stromal cells of secondary lymphoid organs

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1-C-WS4-18-P

Elongation of the small intestine and enlargement of the mesenteric lymph nodes in *Bst1Cd38* double knockout mice

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December 10

WS-5 B cells-1:B cell activation and development

1-D-WS5-1-O/P

Essential role of NADPH oxidase-dependent production of reactive oxygen species in maintenance of sustained B cell receptor signaling and B cell proliferation

Yangyang Feng[1)], Jun Liu[2)], Helmut Grasberger[3)], Ji-Yang Wang[2)], Takeshi Tsubata[1)]

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1-D-WS5-2-P

A role of membrane-bound IgG1 ubiquitination in B cell activation

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1-D-WS5-3-O/P

The COMMD3/8 complex promotes B cell migration and humoral immune response

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1-C-WS5-4-P

Rap1 plays critical roles in B cell recirculation and differentiation

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1-D-WS5-5-P

Involvement of DOCK11 in B-cell responses against T cell-independent type 2 antigens

Akihiko Sakamoto, Mitsuo Maruyama

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1-D-WS5-6-P

The mechanism of B cell activation in T cell independent responses via metabolic reprograming

Saori Fukao, Kei Haniuda, Daisuke Kitamura

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1-D-WS5-7-P

Functional analysis of signal transducing-adaptor protein 1 (STAP-1) in B cells

Yoshiki Ebina, Kashiwakura Jun-ichi, Matsuda Tadashi

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1-D-WS5-8-P

Bim regulates selection of germinal center B cells during the transition into memory cell precursors, but not during the interzonal cycles of division in the dark zone

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1-D-WS5-9-O/P

Critical roles for Rho-associated coiled-coil containing protein kinases in B cell development, maintenance, and germinal center responses

Harumichi Ishigame[1)], Sonoko Takahashi[1,4,5)], Noriko Takahashi[1)], Yoshikazu Ando[1)], Takashi Ikeno[1,6,7)], Tomohiro Miyai[2)], Tomokatsu Ikawa[2)], Takeshi Inoue[7)], Tomohiro Kurosaki[3,6,7)], Takaharu Okada[1,5,8)]

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1-D-WS5-10-O/P

Metabolic control of germinal center B cell and plasma cell differentiation

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1-D-WS5-11-O/P

Inducing Mechanisms of Somatic Hypermutation in Germinal Center B cells

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1-D-WS5-12-O/P

Transcriptional elongation factor *Aff3* regulates class switching of antibody in B cells

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1-D-WS5-13-O/P

The specific induction of IgA production by PKC activators

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1-D-WS5-14-P

Influence of Bach2 expression levels on activated-B cell fate decision

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1-D-WS5-15-P

Regulation of *Aicda* gene expression by nuclear factors and signal transduction factors controlled by BATF

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1-D-WS5-16-P

GANP interacts with translation initiation complex for enhancing c-Myc expression in B cells

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December 10

WS-6 B cells-2:Roles and regulation of B cells in diseases

1-D-WS6-1-O/P

B cell regulation through modulation of autophagy by inhibitory cytokines

Mariko Inoue[1)], Tomohisa Okamura[1,2,3)], Toshihiko Komai[1)], Yukiko Iwasaki[1)], Shuji Sumitomo[1)], Hirofumi Shoda[1)], Kazuhiko Yamamoto[1,3,4)], Keishi Fujio[1)]

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1-D-WS6-2-O/P

Involvement of essential amino acid in human B cell differentiation and its relevant to the pathogenesis of SLE

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1-D-WS6-3-O/P

Molecular mechanisms that trigger autonomous signaling from membrane IgE

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1-D-WS6-4-O/P

Characteristics of naïve B cells in murine IgA Nephropathy

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1-D-WS6-5-P

Kinetics of Ca^{2+} signaling in immune cells predict predisposition and pre-pathological conditions of the immune diseases

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1-D-WS6-6-P

The AhR-Arnt-MafK complex regulates the differentiation of regulatory B cells

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1-D-WS6-7-O/P

Virus-like particle structure enhances protective IgA antibody responses against noroviruses

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1-D-WS6-8-O/P

Influenza hemagglutinin cryptic epitopes that select broadly reactive germinal center B cells in local site

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1-D-WS6-9-O/P

Intrinsic MyD88 signalling in B cells controls IFNγ-mediated early IgG2c class switching in response to a particulate adjuvant

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1-D-WS6-10-P

Alfha4 enhances IgE class switch recombination via ubiquitination of TRAF3 in NF-κB alternative pathway

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1-D-WS6-11-P

IgE antibody class-switch DNA recombination is regulated by the cytokine concentration and the timing of cytokine stimulation

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1-D-WS6-12-P

Regulation of B cell memory formation and metabolism by IgE-BCR

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1-D-WS6-13-P

Regulatory mechanism for intracellular sorting of Parm1 by phosphorylation of NPxY motif

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1-D-WS6-14-P

Analysis of intracellular localization of Parm1 in B cells

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1-D-WS6-15-P

"Universal Light Chain" : A light chain that can match with a wide range of heavy chains maintaining the antigen affinity of the heavy chain

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1-D-WS6-16-P

BonSCI : Bioinformatics tool onSingleCell for Immune profiling

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December 10

WS-7 Dendritic cells and macrophages-1: Differentiation and functions

1-E-WS7-1-O/P

Regulation of *Irf8* expression and mononuclear phagocytes development by distal enhancers

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1-E-WS7-2-O/P

Impaired development of dendritic cells in proteasome subunit mutant mice

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1-E-WS7-3-O/P

The role of Acp2 in lysosomal TLR response

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1-E-WS7-4-O/P

Cholera toxin B can induce interleukin-1β production in peritoneal macrophages through activation of pyrin inflammasome

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1-E-WS7-5-O/P

LPS from lymphoid-tissue resident *Alcaligenes* induces IgA without excessive inflammation via its weak TLR4 agonist activity

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1-E-WS7-6-O/P

Semaphorin 6D reverse signaling controls macrophage lipid metabolism and anti-inflammatory polarization

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1-E-WS7-7-O/P

Lamtor1 (p18) plays a crucial role in DC trafficking especially in interstitial migration

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1-E-WS7-8-O/P

Adipose tissue macrophages promote adiposity by suppressing lipolysis in white adipocytes through activation of the GDF3-ALK7 axis

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1-E-WS7-9-O/P

Involvement of DNAM-1 (CD226) expressed on small peritoneal macrophages in $CD4^+$ T cell priming

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1-E-WS7-10-P

Distinctly regulated functions and mobilization of CD11c-positive cells by TLR3- and IPS-1 signaling in the cornea

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1-E-WS7-11-P

Epigenetic Regulation in Activated Macrophages

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1-E-WS7-12-P

Notch signaling modulates PPARγ level in IL-4-stimulated human macrophages through NEDD4L

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1-E-WS7-13-P

IgG complex with protein A of *Staphylococcus aureus* enhance the differentiation and bone resorption of osteoclasts

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1-E-WS7-14-P

Distinct effect of LPS stimulation on TLR3 expression in macrophage subsets

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1-E-WS7-15-P

Cellular inhibitor of apoptosis protein 1 and 2 are important for the inflammasome activation

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1-E-WS7-16-P

Activation of human monocytes and monocyte-derived dendritic cells by oligomannose-coated liposomes

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1-E-WS7-17-P

Studies on the serum-MAF mediated phagocytic activation mechanism in macrophage

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1-E-WS7-18-P

Molecular mechanisms regulating type I interferon induction in plasmacytoid dendritic cells

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1-E-WS7-19-P

Role of the transcription factor EHF in mouse Langerhans cells

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1-E-WS7-20-P

Functional regulation of plasmacytoid dendritic cells by TNF receptor associated factor 5

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December 10

WS-8 Dendritic cells and macrophages-2: Roles in pathogenesis

1-E-WS8-1-O/P

IRF5 siRNA-loaded biodegradable lipid nanoparticles ameliorate concanavalin A-induced liver injury

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1-E-WS8-2-O/P

PU.1 is a transcriptional activator of *Ccl17* and *Ccl22* and is a potential therapeutic target for allergic diseases

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1-E-WS8-3-O/P

A chemokine signal amplifier FROUNT promotes tumor progression by facilitating migration and activation of tumor-associated macrophage

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1-E-WS8-4-O/P

Importance of SIRPα on dendritic cells for the development of experimental autoimmune encephalomyelitis

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1-E-WS8-5-O/P

Spred2 deficiency exacerbates adipose tissue inflammation and systemic insulin resistance in mice

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1-E-WS8-6-O/P

Disruption of Lnk/SH2B3 increases severity of STZ-induced diabetes

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1-E-WS8-7-O/P

Liver X Receptor activation exerts the different effects on the function of liver resident Kupffer cells and recruited macrophages

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1-E-WS8-8-O/P

Sphingosine-1-phosphate Receptor Modulation Expands CD11b^{+}Gr-1^{+}Cells and Inhibits Lymphocyte Infiltration to Ameliorate Murine Pulmonary Emphysema

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1-E-WS8-9-O/P

The roles of anti-inflammatory macrophages in the peripheral nerve injury-induced neuroinflammation

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1-E-WS8-10-P

Role of dendritic cells and invariant natural killer T cells in glycolipid antigen-induced murine miscarriage

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1-E-WS8-11-P

Analysis of the transport of self-antigens from the skin to regional LNs under inflammatory conditions

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1-E-WS8-12-P

Phytosphingosine–CD300b interaction promotes zymosan-induced nitric oxide-dependent neutrophil recruitment

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1-E-WS8-13-P

Aging Effect on the Function of Macrophages in Maintenance of Dermal Homeostasis

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1-E-WS8-14-P

Effects of new quinolone antibiotics on Th1 cell and Th2 cell development mediated by Langerhans cells

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1-E-WS8-15-P

Tolerogenic function of conventional dendritic cells in the protective effect of sublingual immunotherapy (SLIT) on allergic disorders

Noriaki Miyanaga, Hideaki Takagi, Tomofumi Uto, Tomohiro Fukaya, Junta Nasu, Takehito Fukui, Katsuaki Sato

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1-E-WS8-16-P

The modulatory function of pineal gland hormone melatonin in encephalomyelitis virus infection

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1-E-WS8-17-P

Induction of cytotoxic $CD11c^{+}CD8$ T cells by $CD11b^{-}LIGHT^{+}$ dendritic cells that present tumor antigens

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1-E-WS8-18-P

Role of S-nitrosoglutathione reductase (GSNOR) on inflammation

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WS-9 Systemic autoimmune diseases-1

1-F-WS9-1-O/P

Immune cell-type specific multi-omics analysis revealed contribution of mitochondria in Bcells to systemic lupus erythematosus

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1-F-WS9-2-O/P

Expansion of peripheral helper T cell are associated with disease activity and B cell differentiation in systemic lupus erythematosus

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1-F-WS9-3-O/P

Autoreactive thymus-derived CXCR5$^-$ B cell-helper T cells promote B cells to produce autoantibodies

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1-F-WS9-4-O/P

mTORC1 phosphorylation in CXCR3$^+$memory B cells and its relevance to the pathogenesis of rheumatoid arthritis

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1-F-WS9-5-O/P

Favorable efficacy of rituximab in ANCA-associated vasculitis patients with excessive B cell differentiation

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1-F-WS9-6-O/P

RNA-Seq transcriptomics reveals potential contribution of each immune cell subset to the pathogenesis of idiopathic inflammatory myopathy

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1-F-WS9-7-O/P

Immunophenotyping and gene expression analysis of PBMC subsets in Behcet's disease

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1-F-WS9-8-O/P

Transcriptome analysis of peripheral blood immune cells for exploring characteristic gene module of systemic sclerosis

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1-F-WS9-9-P

Identifying disease-specific leukocyte subsets in ANCA-associated vasculitis through immune cell phenotyping

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1-F-WS9-10-P

Pathogenic relevance of T follicular helper cell and plasmablast in patients with systemic lupus erythematosus

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1-F-WS9-11-P

Plasmablast Proliferation is Associated with Toll Like Receptor 7 Polymorphisms, Contributing to the Production of Autoantibodies in Patients with Antiphospholipid Syndrome

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1-F-WS9-12-P

NR4A2 controls the development of self-reactive Th responses *in vivo*

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1-F-WS9-13-P

Sparse analysis of peripheral blood Treg phenotype and clinical background factors in patients with rheumatoid arthritis

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WS-10 Systemic autoimmune diseases-2

1-F-WS10-1-O/P

Enhanced TLR7 and STING pathways in systemic lupus erythematosus

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1-F-WS10-2-O/P

Pathophysiological research of systemic lupus erythematosus (SLE) using healthy donor and patient derived iPS cells with genome editing approach

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1-F-WS10-3-O/P

Recognition of DNA / HLA-class II complex by anti-DNA antibodies from SLE patients

Hideaki Tsuji[1,2,3)], Koichiro Ohmura[1)], Shuhei Sakakibara[4)], Noriko Arase[2,3)], Masako Kohyama[2,3)], Tadahiro Suenaga[2,3)], Hitoshi Kikutani[4)], Tsuneyo Mimori[1)], Hisashi Arase[2,3)]

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1-F-WS10-4-O/P

Semaphorins and their involvement in the pathogenesis of autoimmune vasculitis

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1-F-WS10-5-O/P

The Immunogenetics of Inflammatory Mechanisms by Fibroblast-like Synoviocytes form Rheumatoid Arthritis Patients

Haruka Tsuchiya[1)], Mineto Ota[1)], Shuji Sumitomo[1)], Kazuyoshi Ishigaki[2)], Yuta Kochi[2)], Yumi Tsuchida[1)], Hirofumi Shoda[1)], Kazuhiko Yamamoto[2)], Keishi Fujio[1)]

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1-F-WS10-6-O/P

RASGRP2 (CalDAG-GEFI) Expression in Rheumatoid Synovium Promotes Adhesion/Migration and IL-6 Production

Hiroyuki Nakamura, Shinsuke Yasuda, Sanae Shimamura, Michihiro Kono, Michihito Kono, Masaru Kato, Kenji Oku, Toshiyuki Bohgaki, Tatsuya Atsumi

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1-F-WS10-7-O/P

Tofacitinib Facilitates the Expansion of Myeloid-Derived Suppressor Cells and Ameliorates Interstitial Lung Disease in SKG Mice

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1-F-WS10-8-O/P

Up-regulation of *TMEM176A* and *TMEM176B* gene were prominent at subclinical stage of pulmonary arterial hypertension in systemic sclerosis

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1-F-WS10-9-P

Treatment with anti-CD11b antibody ameliorates arthritis in a novel arthritis-prone mouse model

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1-F-WS10-10-P

Physiological target and molecular evolution of ACPA obtained from RA patients

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1-F-WS10-11-P

TET3, a DNA oxidase enzyme, facilitates synovial inflammation and bone destruction

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1-F-WS10-12-P

Mitochondrial DNA in membrane vesicles plays critical roles in pathogenesis for Behçet's disease

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1-F-WS10-13-P

The Involvement of Type I Interferon in Human Autoimmune Diseases

JeongHoon Park[1,2)], Hachirou Konaka[2,3)], Yasuhiro Kato[2,3,4)], Eri Itotagawa[2,3)], Hyota Takamatsu[2,3)], Atsushi Kumanogoh[2,3)]

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1-F-WS10-14-P

The novel finding for the structure of IgM pentamer harboring AIM/CD5L

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WS-11 Cytokines and chemokines-1: Inflammation

1-G-WS11-1-O/P

The COMMD3/8 complex dictates the specificity of GRK recruitment to chemoattractant receptors

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1-G-WS11-2-O/P

Smothened competes with CXCR4 for G_{ai} coupling to fortify immune synapse and regulate T cell activation

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1-G-WS11-3-O/P

Roles of CX3CR1-fractalkine axis during thrombus formation and resolution on murine deep vein thrombosis model

Mizuho Nosaka[1)], Yuko Ishida[1)], Akihiko Kimura[1)], Yumi Kuninaka[1)], Naofumi Mukaida[2)], Toshikazu Kondo[1)]

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1-G-WS11-4-P

CCL2 enhance skin wound healing by promoting macrophage and endothelial progenitor cell accumulation in diabetic mice

Yuko Ishida[1)], Yumi Kuninaka[1)], Mizuho Nosaka[1)], Akihiko Kimura[1)], Naofumi Mukaida[2)], Toshikazu Kondo[1)]

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1-G-WS11-5-P

Analysis of the localization of immune cells in mice deficient in CC chemokine ligand CCL20

Nozomi Sachi, Shinya Hidano, Naganori Kamiyama, Sotaro Ozaka, Takashi Kobayashi

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1-G-WS11-6-P

$S1P_1$/Fas signal crosstalk via NF-κB activation in osteoclasts controls subchondral bone remodeling in murine arthritis

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1-G-WS11-7-O/P

TNF receptor associated factor 5 controls oncostatin M-mediated lunginflammation

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1-G-WS11-8-P

Protein S ameliorates acute lung injury by suppressing inflammation and apoptosis

Taro Yasuma[1,2)], Atsuro Takeshita[1,2)], Kentaro Fujiwara[3)], Yoshinori Takahashi[3)], Kentaro Asayama[3)], Kota Nishihama[2)], Corina D'Alessandro-Gabazza[1)], Masaaki Toda[1)], Tetsu Kobayashi[3)], Esteban Cesar Gabazza[1)]

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1-G-WS11-9-P

Dissociation of STAT3 C-terminal tail from its own SH2 is critical for phophoSer727-dependent STAT3 inactivation

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1-G-WS11-10-P

Tyk2 regulates Protein kinase A-IL-10 pathway and promotes inflammation

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1-G-WS11-11-O/P

Ferulic acid, a dietary polyphenol inhibits interleukin 17 mediated rheumatoid arthritis pathogenesis via the regulation of IL-17/IL-17RA/STAT-3 signaling cascade

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1-G-WS11-12-O/P

Tannic acid affects dopamine receptors, regulates immune responses, and ameliorates experimentally induced colitis

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1-G-WS11-13-P

Role of IL-19 in oxazolone-induced colitis

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1-G-WS11-14-P

The role of Interleukin-19 in hapten-induced contact hypersensitivity

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1-G-WS11-15-O/P

Adipose tissue-derived stromal/stem cells suppressed the hepatic stellate cell proliferation stimulated by hepatic inflammatory cell and IL-17A in murine non-alcoholic steatohepatitis

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1-G-WS11-16-O/P

Chronic interferon-gamma signals impair memory CD8 T cell maintenance

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1-G-WS11-17-P

Comparison of atopic dermatitis-like skin lesions between BALB/c mice and C57BL/6 mice

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1-G-WS11-18-P

Intestinal microbiota altered by chronic kidney disease regulates intestinal inflammation

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1-G-WS11-19-P

Single-cell transcriptome identifies cytokine/chemokine expression signatures of lung cell subsets in murine pulmonary fibrosis

Shigeyuki Shichino[1,2)], Shin-ichi Hashimoto[1,2,3)], Satoshi Ueha[1,2)], Kouji Matsushima[1,2)]

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WS-12 Cytokines and chemokines-2

1-G-WS12-1-O/P

Hydroxypropyl-β-cyclodexrin (HP-β-CD) act as IL-33-indusible adjuvant in intranasal administration

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1-G-WS12-2-O/P

Role of group 2 innate lymphoid cells in angiogenesis

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1-G-WS12-3-O/P

A division of labour for the type I interferon and apoptosis induction after viral infection

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1-G-WS12-4-P

A CCR4 antagonist has a potent vaccine adjuvant activity through the inhibition of regulatory T-cell recruitment into the muscle

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1-G-WS12-5-P

A role of CCL28 as an activating factor for IgA-secreting cells

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1-G-WS12-6-O/P

RSV induces suppressive Gas6/Axl signaling in macrophages increasing susceptibility to secondary *S. pneumoniae* infection

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1-G-WS12-7-O/P

Loss of memory CD4$^+$ T-cells mediated by IL-27 during malaria infection

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1-G-WS12-8-O/P

An effector IRG is a critical factor mediating interferon-γ-induced ubiquitin decoration of *Toxoplasma gondii* parasitophorous vacuoles

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1-G-WS12-9-O/P

Noncanonical Pathway for Regulation of CCL2 Expression by an mTORC1-FOXK1 Axis Promotes Recruitment of Tumor-Associated Macrophages

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1-G-WS12-10-P

Efficient induction of memory CD8+ T cell responses by a highly active form of XCL1

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1-G-WS12-11-P

High levels of functional soluble OX40 in plasma from patients with acute adult T cell leukemia

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1-G-WS12-12-O/P

Involvement of prokineticin 2-expressing neutrophil infiltration in 5-fluorouracil-induced aggravation of breast cancer metastasis to lung

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1-G-WS12-13-P

The mechanism of action of Spi-B in transcriptional activation of the interferon-α4 gene

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1-G-WS12-14-P

Modification of immune function by neonicotinoid and organophosphorus insecticides

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1-G-WS12-15-P

The ERM protein moesin regulates natural killer cell distribution *in vivo*

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1-G-WS12-16-P

Topological categorization of signal transduction pathway using flow cytometry

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December 10

WS-13 Helper T cells

1-H-WS13-1-O/P

Tet2 and Tet3 regulate helper T cell differentiation in the periphery

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1-H-WS13-2-P

A crucial role of JunB in attenuating epithelial damage-induced colitis through induction of regulatory T cells

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1-H-WS13-3-P

Downregulated APL expression in T cells in the setting of chronic colitis

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1-H-WS13-4-O/P

Host defense against oral bacteria by bone-damaging T cells

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1-H-WS13-5-O/P

Satb1-mediated regulation of GM-CSF and PD-1 in effector Th17 cells in experimental autoimmune encephalomyelitis

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1-H-WS13-6-O/P

Regulation of pathogenic T helper 17 cell differentiation by steroid receptor coactivator-3

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1-H-WS13-7-P

NQO1 regulates pathogenisity of Th17 cells by suppressing IL-10 production

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1-H-WS13-8-P

Bob1 regulates the production of IL-17 through the interaction with RORγt

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1-H-WS13-9-P

Canonical TGF-β signaling via Smad3/4 suppresses Th17 differentiation

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1-H-WS13-10-P

The important role of glutaminase 1 (Gls1)-mediated glutamine metabolism in Th17 differentiation

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1-H-WS13-11-O/P

Super enhancer driving IL-22-related genes and its genetic link to autoimmune diseases

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1-H-WS13-12-O/P

Roles of the nuclear orphan receptor Nr4a in Th/Treg differentiation and in regulation of allergic asthma pathogenesis

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1-H-WS13-13-P

The critical role of Bach2 in regulating antigen-independent Th2 responses

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1-H-WS13-14-O/P

Molecular mechanism for IFNγ-mediated inhibition of Th2 cell proliferation

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1-H-WS13-15-O/P

Cholesterol 25-hydroxylase expressing CD4$^+$ T cell regulates tissue inflammation

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1-H-WS13-16-P

The role of regulatory T cells in humoral immune responses

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1-H-WS13-17-O/P

IL-10-Producing Tr2 cells Induced by GATA3 / CREB / CEBPβ Signaling are Strongly Regulated by COX2-PGE$_2$ Axis

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1-H-WS13-18-P

Pathogenesis of Psoriasis with human Th17 and Tc17 Differentiation

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December 11

WS-14 T cells-1: T cell response and function

2-A-WS14-1-O/P

Rap1 regulates active conformation of α4β7 and affinity for MadCAM-1

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2-A-WS14-2-O/P

W747 talin1 binding site in cytoplasmic domain of the integrin beta2 subunit is crucial for T cell migration and activation

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2-A-WS14-3-O/P

Phosphatidic acid-dependent translocation and de-phosphorylation of Rap1GEF control T cell movement

Yasuyuki Momoi, Sayaka Ishihara, Akihiko Nishikimi, Tsuyoshi Sato, Koko Katagiri

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2-A-WS14-4-O/P

Roles of Rap1, Talin-1 and Kindlin-3 in lymphocyte homing to peripheral and mucosal lymph nodes

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2-A-WS14-5-O/P

Pyruvate dehydrogenase phosphatase catalytic subunit 2 limits Th17 differentiation

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2-A-WS14-6-P

Massive *in silico* studies identified UBASH3A as potential pathogenic factor that is dysregulated in CD4$^+$ T cells of patients with rheumatoid arthritis

Kaoru Yamagata[1)], Shingo Nakayamada[1)], Ippei Miyagawa[1)], Fumi Uemura[1)], Shigeru Iwata[1)], Shigeaki Kato[2,3)], Yoshiya Tanaka[1)]

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2-A-WS14-7-O/P

T-follicular regulatory cells in human blood

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2-A-WS14-8-P

Regulatory T cells and B cell subsets could be associated with autoimmunity in common variable immunodeficiency patients

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2-A-WS14-9-O/P

Regulation of T cell response by TCR-like antibodies

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2-A-WS14-10-P

Development of a novel monoclonal antibody which binds to most HLA-A allomorphs in a peptide-dependent, yet sequence promiscuous fashion

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2-A-WS14-11-O/P

Sox4 facilitates CXCL13 production by human CD4$^+$ T cells under inflammatory conditions

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2-A-WS14-12-P

T cell responses are limited by free fatty acid receptor 2 (Ffar2) mediated signaling

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2-A-WS14-13-P

A role of Ripk3 and Gsdmd in the development of autoimmune arthritis in SKG mice

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2-A-WS14-14-P

Enriched environment attenuates the development of EAE via activation of brain neural circuit

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2-A-WS14-15-P

CD4$^+$ T cells are affected by the gravitational stress via the change of energy metabolism

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2-A-WS14-16-P

Functional roles of CX3CR1$^+$ peripheral helper T (Tph) cells in IgG4-related disease

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2-A-WS14-17-O/P

Development and function of a unique bone marrow-resident CD4/CD8 double-negative αβT cell subset

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2-A-WS14-18-P

Roles of IKK2 in CD8$^+$ T cells in contact hypersensitivity

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2-A-WS14-19-O/P

Antigen presentation by pulmonary macrophages drives the establishment of lung-resident CD8 T cell memory

Shiki Takamura[1], Paul R Dunbar[2], Emily K Cartwright[2], Alexander N Wein[2], Tetsuo Tsukamoto[1], Zheng-Rong Tiger Li[2], Nivedha Kumar[2], Ida Uddbäck[3], Sarah L Hawyard[2], Satoshi Ueha[4], Jacob E Kohlmeier[2]

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2-A-WS14-20-P

Immune system simulation based on multi-agent model

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December 11

WS-15 Virus infection

2-B-WS15-1-P

Immune Responses Against H5N6 Highly Pathogenic Avian Influenza Virus In A Non-Human Primate Model

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2-B-WS15-2-O/P

ZBP1 governs neutrophil-mediated inflammation in influenza virus infection via IL-1α

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2-B-WS15-3-P

Histone modification enzyme Setdb2 plays a critical role in a murine model of influenza associated encephalopathy

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2-B-WS15-4-P

Influenza virus infection causes reduced G-CSF production in lung, followed by neutrophil dysfunction against secondary bacterial infection

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2-B-WS15-5-P

Effects of pandemic H1N1 influenza virus infection on maternal and fetal in pregnant mouse model

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2-B-WS15-6-P

Regulation of innate immunity through ITAM-coupled receptors in influenza virus infection

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2-B-WS15-7-O/P

In vivo imaging of the pathophysiological changes and dynamics of immune cells in influenza virus-infected mouse lung

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2-B-WS15-8-O/P

Adjuvant effect of a nanoparticulate TLR9 agonist for protection against heterologous influenza challenge through FcRγ-mediated effector functions

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2-B-WS15-9-P

Priming immunization with whole-virion influenza vaccines is essential for induction of ADCC activities of virus-specific antibodies

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2-B-WS15-10-O/P

iPS cells serves as a source of dendritic cells for *in vitro* dengue virus infection model

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2-B-WS15-11-P

The search for Theiler's murine encephalomyelitis virus receptor

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2-B-WS15-12-O/P

Identification of a novel anti-viral protein essential for innate immune reseponses

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2-B-WS15-13-P

Regulatory role of MTMR3/4 in innate immune signaling

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2-B-WS15-14-P

Human antigen R regulates innate immune response via mRNA stability

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2-B-WS15-15-O/P

HIV-1 Nef, in cooperation with Hematopoietic cell kinase (Hck), augmented the interaction between SERINC5 and SERINC3, towards the increase of intrinsic infectivity of HIV-1 particles

Eiji SHINYA, Atsuko OWAKI, Masumi SHIMIZU, Jiro MATSUMURA, Sadayuki OKURA, Hidemi TAKAHASHI

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2-B-WS15-16-O/P

STING ligand re-activates latently SIV infected cells and enhances SIV-specific CTL responses

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2-B-WS15-17-P

Long-term protective efficacy of live-attenuated AIDS virus expressing an adjuvant molecule against pathogenic SHIV challenge in cynomolgus macaques

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2-B-WS15-18-P

Extracellular vesicle microRNAs in the blood exacerbate experimental autoimmune encephalomyelitis

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2-B-WS15-19-O/P

Combating herpesvirus encephalitis by potentiating a TLR3-mTORC2 axis

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2-B-WS15-20-P

The role of the immunoglobulin produced by Epstein-Barr virus reactivation-induced pathway in autoimmune reaction

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2-B-WS15-21-P

Induction of humoral and cellular immune response to HBV vaccine can be up-regulated by STING ligand

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2-B-WS15-22-P

Development of rapid identification system of vaccine candidate peptides by fusing two different phage display systems

Narutoshi Tsukahara[1)], Nozomi Kitade[1)], Shuhei Yonamine[1)], Shuhei Hashiguchi[2)], Akikazu Murakami[1)], Hidehiro Kishimoto[1)]

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2-B-WS15-23-P

Preferential uptake of M13 phage vaccine by murine macrophages without the production of proinflammatory cytokines

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December 11

WS-16 Tolerance and Immune suppression-1: Treg cells and tolerance

2-C-WS16-1-O/P

Role of Jazf1 gene in regulatory T cells

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2-C-WS16-2-P

Activation alters the metabolic signature of human regulatory T cells

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2-C-WS16-3-P

Manipulating the stability of antigen-specific Treg by enhancing the functional avidity of the superior dominant peptide via its flanking residues harnesses autoimmunity with restricting the reactivity to disease-related antigens and promoting tissue repair capacity

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2-C-WS16-4-O/P

TCR-mediated Sox12 induction promotes peripherally induced Treg cell differentiation under inflammatory conditions

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2-C-WS16-5-P

Analysis of the role of RORγt$^+$Foxp3$^+$ regulatory T cells in the regulation of autoimmune arthritis

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2-C-WS16-6-P

Theoretical study of relationship between allergy and intestinal microbiome:-- allergy intervention targeting on intestinal microbiome

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2-C-WS16-7-O/P

Strong TCR stimulation promotes the stabilization of Foxp3 expression in regulatory T cells induced *in vitro* through increasing the demethylation of *Foxp3* CNS2

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2-C-WS16-8-P

Critical role of plasmacytoid dendritic cells in establishing oral tolerance leading to abortive allergic sensitization

Tomofumi Uto, Hideaki Takagi, Tomohiro Fukaya, Junta Nasu, Takehito Fukui, Noriaki Miyanaga, Katsuaki Sato

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2-C-WS16-9-P

Graft protective effect and induction of CD4$^+$Foxp3$^+$regulatory T cells by Anti-CD272 antibody (6B2) in murine cardiac allograft transplantation

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2-C-WS16-10-O/P

The transcription factor BATF functionally cooperates with Foxp3 to control effector program in regulatory T cells

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2-C-WS16-11-P

Suppression of B cells by CD19-specific chimeric antigen receptor transducing regulatory T cells (CAR-Tregs)

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2-C-WS16-12-P

TCR-independent activation of murine CD4$^+$CD25$^+$Foxp3$^+$ regulatory T cells leads their apoptosis accompanied by proliferation during immune responses

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2-C-WS16-13-O/P

Transcription factor JunB is essential for effector regulatory T cell homeostasis and function

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2-C-WS16-14-O/P

DNAM-1 regulates the Foxp3 stability of regulatory T cells under inflammatory conditions

Kazuki Sato[1,2], Yumi Yamashita-Kanemaru[1], Fumie Abe[1,2], Yuho Nakamura[1,3], Rikito Murata[1,4], Mamoru Ito[5], Akira Shibuya[1,2], Kazuko Shibuya[1]

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December 11

WS-17 Systemic autoimmune diseases-3

2-D-WS17-1-O/P

Development and activation of B cells expressing germline precursor of SLE-derived high-affinity anti-DNA antibody in knock-in mice

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2-D-WS17-2-O/P

Expansion of TLR7 expressing monocyte derived cells in imiquimod-induced lupus model

Atsushi Nomura, Daisuke Noto, Goh Murayama, Asako Chiba, Sachiko Miyake

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2-D-WS17-3-O/P

IRF5 as a potent target beyond type I interferons for the next stage SLE therapy

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2-D-WS17-4-O/P

***Peptidylarginine deiminase 4* deficiency ameliorated murine model of lupus via reduction of neutrophil migration to kidney**

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2-D-WS17-5-O/P

Cholesterol accumulation in CD11c+ immune cells is a causal and targetable factor in autoimmune disease

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2-D-WS17-6-O/P

Roles of CD72 in the regulation of autoantibody production and type 1 interferon production in autoimmune disease

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2-D-WS17-7-O/P

Analysis of suppressive ability and its mechanisms of rice seeds expressing altered peptide ligands against M3R induced sialadenitis

Hanae Kudo, Hiroto Tsuboi, Hiromitsu Asashima, Hiroyuki Takahashi, Fumika Honda, Yuko Ono, Saori Abe, Yuya Kondo, Isao Matsumoto, Takayuki Sumida

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2-D-WS17-8-P

Dock8-Positive CD4 T cell as Autoantibody-Inducing CD4 T (*ai*CD4 T) Cell That Causes Systemic Lupus Erythematosus (SLE): Proof of Concept of Self-Organized Criticality Theory as a Cause of SLE

Shunichi Shiozawa[1)], Ken Tsumiyama[1)], Yumi Miyazaki[1)], Keiichi Sakurai[1)], Masaaki Miyazawa[2)]

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2-D-WS17-9-P

Anti-ribosomal P antibody induces Fcγ receptor-dependent multiple organ dysfunction through TNF-α production

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2-D-WS17-10-P

Continuous transcutaneous sensitization of TLR7 agonists enhance SLE-prone pathology of NZBWF1 mice

Kunihiro Hayakawa[1)], Maki Fujishiro[1)], Yuko Yoshida[1)], Kozo Watanabe[1)], Yuko Kataoka[1)], Yuki Matsuoka[1)], Keigo Ikeda[2)], Shinji Morimoto[2)], Iwao Sekigawa[2)]

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2-D-WS17-11-P

Effect of anti-cytokine vaccine in lupus-like nephritis model

Yuka Ikeda[1)], None None[2)], None None[3)], None None[4)], None None[5)]

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2-D-WS17-12-P

Oligonucleotide therapeutics with pDNA/lipoplex would not cause systemic lupus erythematosus but exacerbate systemic lupus erythematosus via formation immune complexes (pDNA/lipoplex-anti DNA antibodies)

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2-D-WS17-13-P

SH3BP2 gain-of-function mutation alleviates lupus phenotypes in B6.MRL-Fas^{lpr}mice

Akiko Nagasu[1)], Tomoyuki Mukai[1)], Masanori Iseki[2)], Kyoko Kawahara[1)], Shoko Tsuji[1)], Katsuhiko Ishihara[2)], Yoshitaka Morita[2)]

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December 11

WS-18 Cancer immunotherapy-1

2-E-WS18-1-O/P

The activated conformation of integrin β7 is a novel multiple myeloma–specific target for CAR T cell therapy

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2-E-WS18-2-O/P

Anti - glypican-1 (GPC-1) - CAR-T cells can completely eradicate established solid tumor without adverse effects

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2-E-WS18-3-O/P

Generation of CAR T- cells recognizing malignant mesothelioma specific antigen

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2-E-WS18-4-O/P

Aryl hydrocarbon receptor inhibition generates long-surviving memory T cells for optimal adoptive immunotherapy

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2-E-WS18-5-O/P

Metabolic Reprogramming requires Stem Cell Memory T Cells phenotypes for Adoptive Immunotherapy

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2-E-WS18-6-P

anti-tumor effect of ursolic acid on human T-Cell leukemia cells was not induced by apoptosis

Mengyue Shen[1)], Kentaro Morita[1)], Duo Wang[1)], Tsukasa Nakanishi[1,2)], Noriaki Kitamura[1,2)], Junichi Tsukada[1,2)], Tamotsu Kanazawa[1)]

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2-E-WS18-7-P

Cancer Vaccine Composed of Whole Tumor Cells Genetically Modified to Secrete the XCL1

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2-E-WS18-8-P

Creation of T cell medicine capable of avoiding functional depression due to PD-L1/PD-1 signaling

Kazuki Shigematsu, Kento Fujiwara, Masashi Tachibana, Naoki Okada

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2-E-WS18-9-O/P

iPSC-derived T cells exhibit superior effector functionality with rejuvenated phenotype compared to parental T-cell clones

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2-E-WS18-10-O/P

Generation of CTLs from iPSCs transduced with TCR genes: toward the development of "off-the-shelf T cells"

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2-E-WS18-11-O/P

Therapy of metastatic colon cancer by allogeneic MHC-deficient and interferon-producing myeloid cells derived from mouse embryonic stem cells

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2-E-WS18-12-P

WT1-specific cytotoxic T lymphocytes regenerated from T cell-derived iPS cells exert therapeutic effect in renal cell carcinoma

Soki Kashima[1,2], Seiji Nagano[1], Kyoko Masuda[1], Shun Kumehara[1], Yuka Kobayashi[1], Takeshi Watabnabe[1], Takamitsu Inoue[2], Tomonori Habuchi[2], Hiroshi Kawamoto[1]

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2-E-WS18-13-P

Development of a feeder-free system for the regeneration of killer T cells from iPS cells

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2-E-WS18-14-P

Type 1 IFN-delivery by myeloid cells from induced pluripotent stem cells elicits systemic antitumor immunity via dendritic cells

Rong Zhang[1], Nobuhiro Tsuchiya[2], Tianyi Liu[3], Yosuke Kubo[4], Satoshi Nakahara[4], Azusa Miyashita[4], Satoshi Fukushima[4], Hironobu Ihn[4], Satoru Senju[5], Itaru Endo[2], Tetsuya Nakatsura[1], Yasushi Uemura[1]

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December 11

WS-19 Mucosal-Skin Immunity-1

2-F-WS19-1-O/P

Dectin-2-mediated signaling leads to delayed skin wound healing through enhanced neutrophilic inflammatory response and NETosis

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2-F-WS19-2-O/P

Blockade of TNFR1-dependent and -independent cell death is crucial for normal epidermal differentiation

Ryosuke Miura[1,2], Xuehua Piao[2], Chiharu Nishiyama[1], Hiroyasu Nakano[2]

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2-F-WS19-3-O/P

Isoform-specific functions of dermokine in imiquimod-induced psoriasiform dermatitis: a structural sequalae of impaired epidermal differentiation

Akira Utsunomiya, Takenao Chino, Noritaka Oyama, Vu Huy Luong, Minoru Hasegawa

Medical Sciences, Dermatology, Fukui university, Fukui, Japan

2-F-WS19-4-P

Pivotal role of IL-22BP in the epithelial autoregulation of IL-22 signaling in the control of skin inflammation

Tomohiro Fukaya, Takehito Fukui, Tomofumi Uto, Hideaki Takagi, Junta Nasu, Noriaki Miyanaga, Katsuaki Sato

Division of Immunology, Department of Infectious Diseases, University of Miyazaki, Miyazaki, Japan

2-F-WS19-5-P

Langerhans cells are essential for development of psoriasis-like lesion in a mouse model

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2-F-WS19-6-P

Differentiation of human Langerhans cells from monocytes and their specific function in inducing IL-22-specific T helper cells

Yohei Otsuka[1,2)], Eri Watanabe[1)], Hikaru Takeshita[1,3)], Eiji Shinya[1)], Hidehisa Saeki[2)], Teunis Geijtenbeek[4)], Hidemi Takahashi[1)]

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2-F-WS19-7-P

The role of PAR-2 in atopic dermatitis

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2-F-WS19-8-P

A di-carboxylic acid ester exhibited stronger adjuvant effect than a structurally related glycol ester on an FITC-induced contact hypersensitivity mouse model

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2-F-WS19-9-P

Effect of interferon-γ deficiency on skin wound healing processes

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2-F-WS19-10-P

Crucial role of CD103 in the development of psoriasiform dermatitis through the regulation of cutaneous inflammation

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2-F-WS19-11-P

Constitutive post-transcriptional suppression of IκB-ζ expression mediated by Regnase-1 is counteracted by IL-17 signaling

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2-F-WS19-12-P

Exploration of novel lipid mediators in psoriatic skin inflammation

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2-F-WS19-13-O/P

Immunological association of inducible bronchus-associated lymphoid tissue organogenesis in Ag85B-rHPIV2 vaccine-induced anti-tuberculosis mucosal immune responses in mice

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2-F-WS19-14-O/P

Assessment of G9.1-induced innate immune responses for the development of safe nasal influenza vaccines

Koichiro Tateishi[1,2)], Kayoko Sato[1)], Eita Sasaki[1)], Takuo Mizukami[1)], Junichi Maeyama[1)], Sumiko Iho[3)], Saburo Yamamoto[4)], Norio Yamamoto[5)], Kohtaro Fujihashi[6,7)], Hideki Asanuma[1)]

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2-F-WS19-15-O/P

Short and medium chain triacylglycerols exhibit adjuvant effects in a mouse contact hypersensitivity model

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2-F-WS19-16-O/P

Toll-Like Receptor 7 Agonist-Induced Dermatitis Causes Severe Dextran Sulfate Sodium Colitis

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2-F-WS19-17-P

Berberine improved experimental chronic colitis via regulating interferon-γ productive lamina propria CD4$^+$T cells through AMPK activation

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2-F-WS19-18-P

Nasal double-DNA adjuvant induces interactions between activated CD11c$^+$ dendritic cells and Th1/Th2-type CD4$^+$ T cells for FimA-specific mucosal immunity

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2-F-WS19-19-P

Cigarette smoke suppresses the ulcerative colitis model through the alteration of immune response and microbiota

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2-F-WS19-20-P

Helicobacter species is involved in the pathogenesis of ulcerative colitis developed in the *HLA-DR4* homozygous transgenic mice

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December 11

WS-20 Allergy

2-G-WS20-1-O/P

The role of CD300f in the development of asthma

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2-G-WS20-2-O/P

Airway inflammation after epicutaneous sensitization requires protease activity of low-dose allergen inhalation

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2-G-WS20-3-O/P

Pathogenic Th population disease induction model: From the recruitment of eosinophils to the induction of fibrosis

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2-G-WS20-4-O/P

IgE glycosylation is important for the binding to mast cells and allergy induction

Tatsuya Yamazaki[1)], Masanori Inui[1)], Susumu Tomono[1)], Isao Ichimonji[1)], Kumi Izawa[2,3)], Jiro Kitaura[2,3)], Sachiko-Akashi Takamura[1)]

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2-G-WS20-5-O/P

Regulation of the allergic response by non-canonical type I interferon signaling

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2-G-WS20-6-O/P

Ni-binding capabilities of migratory DCs in skin-draining lymph nodes

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2-G-WS20-7-O/P

Identification and functional analyses of three dendritic cell subsets accumulating in skin-draining lymph nodes upon the expression of thymic stromal lymphopoiein in the skin

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2-G-WS20-8-O/P

Local skin memory response is mediated by tissue resident memory T cells

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2-G-WS20-9-P

Pathological animal model of cochineal dye allergy

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2-G-WS20-10-P

Influence of the skin barrier integrity on the aggravation of food allergy induced by the transdermal antigen sensitization

Takafumi Ooba, Makoto Hattori, Tadashi Yoshida

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2-G-WS20-11-P

Development of a new mouse model of nasal hypersensitivity

Taro Saika

Department of otorhinolaryngology, Kawasaki Medical School, Kurashiki, Japan

2-G-WS20-12-P

Analysis of infiltrated cells in the mucosa of eosinophilic chromic rhinosinusitis patients

Akiko Inoue[1)], Yuriko Tanaka[2)], Kota Wada[1)], Motonari Kondo[2)]

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2-G-WS20-13-P

Role of CD44 ligand on allergen-specific sublingual immunotherapy in a *Dermatophagoides farinae*-induced mouse model of chronic asthma

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2-G-WS20-14-P

Acquired immune mechanisms underlying antigen-induced IL-33 production in the lung

Takeshi Nabe[1)], Masaya Matsuda[1)], Nobuaki Mizutani[2)]

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2-G-WS20-15-P

Effects of subcutaneous immunotherapy (SCIT) on regulatory T cells in airway allergic inflammation model

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2-G-WS20-16-P

TLR9 is a promising target for the neutralizing antibody in allergic airway inflammation

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2-G-WS20-17-P

Dose- and duration-dependency of Allergen-specific sublingual immunotolerance in a murine allergic rhinitis model

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2-G-WS20-18-P

Comparison of susceptibility to sensitization between skin and vaginal mucosa in contact allergy

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2-G-WS20-19-P

Pathogenesis of TSLP-responded Th2 cells in exacerbation of skin inflammation

Masayuki Kitajima[1)], Harumi Suzuki[1)], Steven F. Ziegler[2,3)]

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2-G-WS20-20-P

Effects of selenium deficiency on atopic dermatitis-like skin lesions in mice

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2-G-WS20-21-P

Anti-psoriatic effect of myeloid-derived suppressor cells on imiquimod-induced skin inflammation in mice

Chang-hyun Kim[1)], Jung Ki Yoo[2)], Mi-Young Park[3)]

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2-G-WS20-22-P

Diazinon-induced dysregulation of mast cell function

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December 11

WS-21 Mast cells & granulocytes

2-H-WS21-1-O/P

Phosphatidylserine exposure self-regulates mast cells' degranulation

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2-H-WS21-2-O/P

Orally-desensitized Mast Cells Acquired Regulatory Characteristics for the Control of Food Allergy

Yosuke Kurashima[1,2,3,4,5,6)], Yoshihiro Takasato[2,7)], Masahiro Kiuchi[8)], Kiyoshi Hirahara[8)], Sayuri Murasaki[2)], Jun Kunisawa[3,5)], Masato Kubo[9,10)], Satoshi Uematsu[2,3)], Toshinori Nakayama[8)], Hiroshi Kiyono[2,3,6)]

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2-H-WS21-3-O/P

An inhibitory receptor CD300f suppresses the development of food allergy

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2-H-WS21-4-O/P

Aggregation makes a protein allergenic at the challenge phase of basophil-mediated allergy in mice

Toshihisa Nagao, Yoshinori Yamanishi, Kensuke Miyake, Mio Teranishi, Soichiro Yoshikawa, Yohei Kawano, Hajime Karasuyama

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2-H-WS21-5-P

Cross-talk between Notch signaling and TGF-β signaling regulates mucosal mast cell differentiation

Kazuki Saida[1,2)], Takuya YAshiro[1)], Kazumi Kasakura[1)], Mutsuko Hara[2)], Chiharu Nishiyama[1,2)], Ko Okumura[2)], Nobuhiro Nakano[2)]

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2-H-WS21-6-O/P

Histamine released from skin-infiltrating basophils but not mast cells is crucial for acquired tick resistance in mice

Soichiro Yoshikawa[1)], Yuya Tabakawa[1)], Takuya Ohta[1)], Kayoko Yamaji[2)], Kenji Ishiwata[2)], Yohei Kawano[1)], Yoshinori Yamanishi[1)], Hiroshi Ohtsu[3)], Takahiro Adachi[4)], Naohiro Watanabe[2)], Hirotaka Kanuka[2)], Hajime Karasuyama[1)]

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2-H-WS21-7-O/P

Essential role of basophils in the recruitment of phagocytes to the damaged skin

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2-H-WS21-8-P

Basophils promote monocyte differentiation to M2-like macrophages that display enhanced capacity of allergen clearance

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2-H-WS21-9-P

IL-3 changes activation-dependent intracellular signaling pathways for IL-4 production in and tissue localization of murine basophils

Takuma Kitano[1)], Saotomo Itoh[1)], Shinsuke Taki[2)], Shigeaki Hida[1)]

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2-H-WS21-10-O/P

Cadherin-related family member 3 upregulates the effector functions of eosinophils

Kazuyuki Nakagome[1)], Yury A. Bochkov[2)], Tomoyuki Soma[1)], James E. Gern[2)], Makoto Nagata[1)]

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2-H-WS21-11-P

Small intestinal eosinophils acquire DCIR2 expression after weaning

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2-H-WS21-12-O/P

The association NADPH oxidase independent NETosis with acceleration of mitochondrial ROS production

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2-H-WS21-13-P

Inhibition of p38 regulate endocytosis of neutrophil

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December 12

WS-22 T cells-2: T cell development and selection

3-A-WS22-1-O/P

The epigenetic regulation of gene loci encoding transcription factor critical for the determination of T/B-cell lineages by Lmo2

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3-A-WS22-2-O/P

The Indispensable Synergistic Role of E2A and Notch Signaling upon the T cell Lineage Commitment

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3-A-WS22-3-O/P

Interactome study of Bcl11b during T cell development

Kazuki Okuyama, Satoshi Kojo, Sawako Muroi, Ichiro Taniuchi

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3-A-WS22-4-O/P

Possible involvement of a transposition-like process in antigen receptor gene assembly in jawless vertebrates

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3-A-WS22-5-O/P

Exogenous Foxn1 expression promotes *in vitro* differentiation of thymic epithelial cells from induced pluripotent stem cells that contribute to the prolonged survival of allogeneic transplants

Ryo Otsuka, Haruka Wada, Airi Sasaki, Muhammad Baghdadi, Ken-ichiro Seino

Division of Immunobiology, Institute for Genetic Medicine, Hokkaido University, Sapporo, Japan

3-A-WS22-6-O/P

Transcriptomic analysis of medullary thymic epithelial cells with augmented Aire expression

Hitoshi Nishijima, Junko Morimoto, Minoru Matsumoto, Mitsuru Matsumoto

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3-A-WS22-7-O/P

Early T cell progenitor-derived cells contribute to T cell repertoire selection in the thymus

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3-A-WS22-8-O/P

Role of CD69 on iNKT cell development in the thymus

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3-A-WS22-9-P

Atypical V(D)J recombination, conflicting with 12/23 rule ?

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3-A-WS22-10-P

Sphingomyelin microdomain modulates TCR signal intensity during thymocyte development

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3-A-WS22-11-P

Cooperative regulation of thymic selection by receptor endocytosis and signal strength through TCR and E3 ubiquitin ligase c-Cbl microcluster formation

Kikumi Hata, Hiroaki Machiyama, Noriko Yanase, Masae Furuhata, Hiroko Toyota, Ei Wakamatsu, Tadashi Yokosuka

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3-A-WS22-12-P

The tyrosine kinase Syk is required for development of proinflammatory $\gamma\delta$T cells

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3-A-WS22-13-P

Quantitative Approaches toward T cell Population Homeostasis

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3-A-WS22-14-P

Arf pathway regulates the pathogenicity of Th17 dependent autoimmune disease

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December 12

WS-23 T cells-3: T cell activation and signaling

3-A-WS23-1-P

Development of TCR-antigen identification system using "cis-interaction" of TCR and peptide/MHC complex on a T cell

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3-A-WS23-2-P

Studies of Immunological Synapse Formation and Downstream Signaling Events Using Imaging Flow Cytometry

Naoko Sato[1], Haley R Pugsley[2], Sebastian Seth[3], Karin Eberhart[3], Sherree L Friend[2], Phil Morrissey[2]

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3-A-WS23-3-O/P

Single molecule imaging reveals a distinct difference in Lck-dynamics between CD4$^+$ and CD8$^+$ T cells

Hiroaki Machiyama, Ei Wakamatsu, Noriko Yanase, Kikumi Hata, Masae Furuhata, Hiroko Toyota, Tadashi Yokosuka

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3-A-WS23-4-P

Identification of CD4.B subtype of Microminipigs by a new monoclonal antibodies

Shino Ohshima[1)], Hitoshi Kitagawa[2)], Asako Ando[1)], Yoshie Kametani[1)]

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3-A-WS23-5-P

Membrane lipid microdomain enriched in sphingomyelin modulates T cell receptor-mediated activation

Masakazu Nagafuku, Kaoru Toshima, Jun Horiuchi, Jin-ichi Inokuchi

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3-A-WS23-6-O/P

ZNF131, one of BTB ZF protein family members, is required for proliferation as well as activation of both T and B lymphocytes

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Immunology, Graduate School of Environmental Health Sciences, Azabu University, Kanagawa, Japan[1)], Laboratory of Biomenbrane, Department of genome medicine, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan[2)], Genome dynamics project, Department of genome medicine, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan[3)]

3-A-WS23-7-P

Silencing of the *NFATc4* gene is crucial for cytokine production by T cells

Osamu Kaminuma[1,2,3)], Noriko Kitamura[2)], Akio Mori[2,3)]

Center for Life Science Research, Unniversity of Yamanashi, Yamanashi, Japan[1)], Allergy and Immunology Project, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan[2)], Clinical Research Center for Allergy and Rheumatology, National Hospital Organization, Sagamihara National Hospital, Kanagawa, Japan[3)]

3-A-WS23-8-O/P

Dynamics of the PI3K signaling pathway induced by a T cell costimulator, ICOS

Tadashi Yokosuka, Ei Wakamatsu, Noriko Yanase, Hiroko Toyota, Masae Furuhata, Kikumi Hata, Hiroaki Machiyama

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3-A-WS23-9-P

TCR-stimulation recruits CBP from nucleus to the cytoplasm and affects the protein phosphorylation

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3-A-WS23-10-P

Functional analysis of the adaptor protein STAP-1 in TCR-mediated T cell activation

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3-A-WS23-11-O/P

STAP-2 acts as a positive regulator in TCR-mediated T cell activation

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3-A-WS23-12-O/P

Functional analysis of autoimmune-associated phosphatase PTPN2(TCPTP) in T cells

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3-A-WS23-13-P

Negative regulation of T cell activation and function by the CIN85 adaptor protein

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3-A-WS23-14-O/P

Low-affinity TCR engagement induces Itm2a to mediate T cell maintenance in the periphery

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3-A-WS23-15-P

Mitochondrial transcription factor A rescues defect in T cell receptor responsiveness in SATB1 (special AT-rich sequence binding protein 1) deficient mice

Taku Kuwabara, Fumio Ishikawa, Yuriko Tanaka, Taku Naito, Motonari Kondo

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3-A-WS23-16-P

Reciprocal regulation of STING and TCR signaling by mTORC1 for T cell activation and functions

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3-A-WS23-17-O/P

Ambra1 is involved in TCR signal-mediated metabolic transition

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3-A-WS23-18-P

The tumor suppressor menin determines activated CD8 T cell fate by targeting mTORC1-dependent metabolic activation

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3-A-WS23-19-O/P

PRMT5-mediated arginine methylation essential for the strength of γc family cytokine signaling in T cell maintenance

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December 12

WS-24 Tissue-specific immune diseases-1

3-B-WS24-1-P

TRAF6 in Th17 cells exacerbates the severity of experimental autoimmune encephalomyelitis by regulating CCR6 expression

Naganori Kamiyama, Shinya Hidano, Nozomi Sachi, Sotaro Ozaka, Takashi Kobayashi

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3-B-WS-24-2-P

The role of regulatory T cells in the chronic phase after ischemic storoke

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3-B-WS-24-3-P

The modulation of IL-17 and IL-10 balance in Th17 cells through thyroid hormone signaling

Yoshimitsu Doi[1,2], Takashi Ymamamura[1]

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3-B-WS24-4-P

Extrapituitary prolactin promotes the generation of Eomes-positive helper T cells mediating chronic neuroinflammation

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3-B-WS24-5-O/P

Immunophenotyping of PBMC from patients with multiple sclerosis and neuromyelitis optica spectrum disorder

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3-B-WS24-6-P

Dynamics and potential roles of melanoma cell adhesion molecule in autoimmune disorders of the central nervous system

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3-B-WS24-7-O/P

Significant associations of human *SIGLEC10* polymorphisms with susceptibility to Guillain-Barré syndrome

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3-B-WS24-8-O/P

Eomes$^+$Th cells in patients with secondary progressive multiple sclerosis are associated with actively progressing disease

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3-B-WS24-9-P

Computer model of a gateway of immune cells across blood-brain barrier

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3-B-WS24-10-O/P

TSHR-stimulating autoantibody production by TSHR / MHC class II complexes

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3-B-WS24-11-O/P

TLR4 exacerbates a novel model of myocarditis induced with a picornavirus

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3-B-WS24-12-O/P

The involvement of glutaminolysis in B cell differentiation and its clinical application for type 1 diabetes

Maiko Hajime[1], Shigeru Iwata[1], Mingzeng Zhang[1], Masataka Torigoe[2], Shingo Nakayamada[1], Kei Sakata[3], Yoshiya Tanaka[1]

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3-B-WS24-13-P

Th17/Th1 balance is essential role for autoimmune diabetes NOD and IFNγ^+IL-17$^+$double producing cells

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3-B-WS24-14-O/P

Cd11c-Cre$^+$ *Rab7a*$^{flox/flox}$ mice develop autoimmune hepatitis

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3-B-WS24-15-P

Possible factors which exacerbate autoimmune hepatitis in low-level estrogen

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3-B-WS24-16-O/P

Oral genotoxic bacteria promote intestinal inflammation and tumoringenesis

Sho Kitamoto

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3-B-WS24-17-P

Alginate promotes recovery from DSS-induced colitis in gut microbiota-dependent manner

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3-B-WS24-18-P

The role of IgA and regulatory T cells on acute and chronic phase of inflammatory bowel disease

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3-B-WS24-19-P

CTLA-4 protects against experimental abdominal aortic aneurysm formation

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December 12

WS-25 Tissue-specific immune diseases-2

3-B-WS25-1-P

An analysis of pathophysiology of Sjögren's syndrome in SATB1 deficient mice

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3-B-WS25-2-O/P

Dysregulation of p63 in the salivary gland epithelia initiates the pathogenesis of Sjögren's syndrome

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3-B-WS25-3-P

The role of the cleaved form IL-33 in pathogenesis of Sjögren's syndrome (SS)

Rieko Arakaki[1)], Shinichiro Nakayama[3)], Aya Ushio[1)], Kunihiro Otsuka[1)], Satoshi Kisoda[1)], Takaaki Tsunematsu[2)], Akiko Yamada[1)], Yasusei Kudo[1)], Naozumi Ishimaru[1)]

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3-B-WS25-4-O/P

CD11c-specific ablation of the protein tyrosine phosphatase Shp-1 induces autoimmune sialadenitis: Is it a new model mouse for Sjögren's syndrome?

Masato Kinoshita[1)], Yoriaki Kaneko[1)], Mitsuharu Watanabe[1)], Yuko Ohishi[1)], Shreya Shrestha[1)], Junya Suwa[1)], Yasuyuki Saito[4)], Hiroshi Ohnishi[3)], Yoshihisa Nojima[2)], Takashi Matozaki[4)], Keiju Hiromura[1)]

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3-B-WS25-5-P

A crucial role of follicular helper T cells in autoimmunity of a mouse model for Sjögren's syndrome

Kunihiro Otsuka[1)], Akiko Yamada[1)], Masako Saito[2)], Aya Ushio[1)], Takaaki Tsunematsu[3)], Satoru Kisoda[1)], Yasusei Kudo[1)], Rieko Arakaki[1)], Naozumi Ishimaru[1)]

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3-B-WS25-6-P

CCL22-producing macrophages promote T cell autoimmunity in the target organ of Sjögren's syndrome

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3-B-WS25-7-O/P

A low molecular weight BAFF signaling inhibitor reduces production of autoantibody and suppresses infiltration of B cells into the organs in autoimmune model mice

Keiko Yoshimoto[1,2)], Katsuya Suzuki[1)], Noriyasu Seki[3)], Kunio Sugahara[3)], Kenji Chiba[3)], Tsutomu Takeuchi[1)]

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3-B-WS25-8-P

Deletion of *padi4* exacerbated the arthritis in gp130F759

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3-B-WS25-9-P

Autophagy Promotes Citrullination of Vimentin and Its Interaction with Major Histocompatibility Complex class II in Synovial Fibroblasts

Eri Sugawara, Masaru Kato, Michihito Kono, Yuichiro Fujieda, Toshiyuki Bohgaki, Olga Amengual, Kenji Oku, Shinsuke Yasuda, Tatsuya Atsumi

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3-B-WS25-10-O/P

Establishment of reactive arthritis mouse model by an exosome-mediated inflammation induction mechanism

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3-B-WS25-11-P

Farnesyltransferase inhibitor suppresses the RasGRP4 and Ras interaction of fibroblast-like synoviocytes from patients with rheumatoid arthritis

Sanae Shimamura, Shinsuke Yasuda, Michihito Kono, Yuichiro Fujieda, Masaru Kato, Kenji Oku, Toshiyuki Bohgaki, Tatsuya Atsumi

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3-B-WS25-12-P

The origin of osteoclasts in pannus in arthritis

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3-B-WS25-13-P

Characterization of rheumatoid arthritis-associated interstitial pneumonia using collagen-induced arthritis mice

Tomomi Sato, Hiroki Satooka, Takako Hirata

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3-B-WS25-14-P

Symmetrical inflammation is formed by sensory neural pathway between joints in collagen-induced arthritis

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3-B-WS25-15-O/P

Necrostatin-7, but not Necrostatin-1, suppresses RANK-NFATc1 signaling and macrophage to osteoclast differentiation

Hideto Yasutomi[1)], Hiroaki Fuji[2)], Saori Ohmae[3)], Naruto Noma[2)], Kazuya Izumi[1)], Shigeaki Hida[1)], Mineyoshi Aoyama[1)], Keiko Iwaisako[2,4)], Shinji Uemoto[2)], Masataka Asagiri[1,2)]

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3-B-WS25-16-O/P

Gene profiling of macrophages stimulated by vitamin E-blended ultra-high molecular weight polyethylene debris of orthopedic implants identifies IL-27 as potent regulator of osteolysis

Alaa Terkawi, Gen Matsumae, Masanari Hamasaki, Norimasa Iwasaki

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3-B-WS25-17-P

Exploring RANKL-independent mechanisms of osteoclastogenesis and bone resorption in aseptic loosening of joint arthroplasty

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3-B-WS25-18-P

THE ROLE OF CLUSTERIN IN A MODEL OF HYPEROXIA-INDUCED ACUTE LUNG INJURY

Jung Yeon Hong, Mi na Kim, Eun Ji Kwak, Eun Gyul Kim, Kyung Won Kim, Myung Hyun Sohn

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3-B-WS25-19-P

Involvement of Activated Leukocyte Cell Adhesion Molecule (ALCAM/CD166) in Pulmonary Fibrosis

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3-B-WS25-20-P

Glomerulosclerosis and renal failure induced by podocyte-specific overexpression of human transforming growth factor-β1

Atsuro Takeshita[1,2)], Taro Yasuma[1,2)], Kota Nishihama[2)], Yuko Okano[2)], Corina N. D'Allesandro[1)], Masaaki Toda[1)], Yutaka Yano[2)], Esteban C. Gabazza[1)]

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3-B-WS25-21-O/P

A novel mouse model of diabetic nephropathy using a transgenic mouse with glomerulus-specific overexpression of human transforming growth factor-β1

Kota Nishihama[1,2)], Atsuro Takeshita[3)], Taro Yasuma[3)], Corina Gabazza[3)], Prince Baffour Tonto[3)], Masaaki Toda[3)], Yutaka Yano[4)], Esteban Gabazza[3)]

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3-B-WS25-22-P

演題取り下げ

3-B-WS25-23-O/P

Impacts of circulating AIM protein on the pathogenesis of IgA nephropathy via inducing *in situ* inflammatory immune-complex formation

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3-B-WS25-24-P

Redox-mediated regulatory T cell homeostasis and its involvement in autoimmunity

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WS-26 Tolerance and Immune suppression-2: Antigen presentation and co-stimulation in Tolerance

3-C-WS26-1-O/P

Regulation of diabetogenic T cell response by antibodies against peptide-MHC class II complex

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3-C-WS26-2-O/P

Deletion of CD74 (invariant chain) in adult mice results in autoantibody production

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3-C-WS26-3-O/P

LAG-3 preferentially inhibits activation of CD4 T cells recognizing stable pMHCII by its conformation-dependent recognition of MHCII

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3-C-WS26-4-P

The preventative effect of mTOR inhibition on HLA-class II DR expression via tetraspannin

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3-C-WS26-5-O/P

Crucial role of conventional dendritic cells in the protective effect of sublingual immunotherapy (SLIT) on allergic disorders

Hideaki Takagi, Noriaki Miyanaga, Tomofumi Uto, Tomohiro Fukaya, Junta Nasu, Takehiko Fukui, Katsuaki Sato

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3-C-WS26-6-P

Analysis of seminal plasma induced uterine tolerogenic dendritic cells before implantation

Ippei Yasuda[1,2], Mizuki Ueda[1], Taiki Moriya[1], Ryoyo Ikebuchi[1,3], Yutaka Kusumoto[1], Shigeru Saito[2], Michio Tomura[1]

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3-C-WS26-7-P

PQA-18 versus Tofacitinib in suppression of the macrophage differentiation

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3-C-WS26-8-O/P

Protective role of plasmacytoid dendritic cells in acute non-viral hepatitis via induction of interleukin-35 producing regulatory T cells

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3-C-WS26-9-P

Induction of immune tolerance by combination treatment with fingolimod (FTY720) plus pathogenic antigen in a glucose-6-phosphate isomerase peptide-induced arthritis mouse model: the fifth report

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3-C-WS26-10-O/P

Dendritic cells expressing a unique set of genes associated with immunological tolerance are specialized to expand thymus-derived Foxp3$^+$ regulatory T cells in the ultraviolet B-exposed skin

Sayuri Yamazaki[1)], Mizuyu Odanaka[1)], Akiko Nishioka[2)], Hiroaki Shime[1)], Hiroaki Hemmi[3,4)], Masaki Imai[2)], Tsuneyasu Kaisho[3,4)], Naganari Ohkura[5,6)], Shimon Sakaguchi[5)], Akimichi Morita[2)]

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3-C-WS26-11-O/P

PD-1 primarily targets TCR-signal in the inhibition of functional T cell activation

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3-C-WS26-12-O/P

Silencing effects of B7-DC in cutaneous DCs on allergic skin diseases

Emi Furusawa[1,2)], Taisei Noda[1)], Takuya Komiyama[1)], Tatsukuni Ohno[1)], Hiroo Yokozeki[3)], Katsunori Kobayashi[4)], Hidetoshi Hamamoto[4)], Michiyo Miyashin[2)], Miyuki Azuma[1)]

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3-C-WS26-13-P

Single-cell analysis of autoreactive T cells under the control of PD-1

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3-C-WS26-14-P

CD155-transducing signaling through TIGIT plays an important role in transmission of tolerant state and suppression capacity

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WS-27 Tolerance and Immune suppression-3: Tolerance and disease

3-C-WS27-1-O/P

Cytokine-mediated Immune tolerance via mitochondrial reprogramming

Toshihiko Komai[1)], Tomohisa Okamura[1,2,3)], Mariko Inoue[1)], Kaoru Morita[1)], Yukiko Iwasaki[1)], Shuji Sumitomo[1)], Hirofumi Shoda[1)], Kazuhiko Yamamoto[1,3,4)], Keishi Fujio[1)]

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3-C-WS27-2-O/P

A novel mechanism for induction of tissue-specific immune evasion

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3-C-WS27-3-P

Lymphocyte-dependent accumulation of myeloid-derived suppressor cell (MDSC)-like CD11b$^+$/Gr-1$^+$ cells in the periphery of NF-κB-inducing kinase (NIK) mutant mice

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3-C-WS27-4-P

Anti-IL-6 receptor antibody ameliorates the function of LAG3$^+$ Tregs in murine arthritis model

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3-C-WS27-5-P

One role of regulatory T cells based on the result of administration of the therapeutic agent to lupus model mouse

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3-C-WS27-6-P

Epistatic interaction between *fcgr2b* and *Slam* family genes in susceptibility to defective foreign protein-induced tolerance

Hiroyuki Nishimura[1)], Masaomi Obata[1)], Mareki Ohtsuji[1)], Yo Kodera[1)], Toshiyuki Takai[2)], Katsuko Sudo[3)], J. Sjef Verbeek[4)], Sachiko Hirose[1)]

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3-C-WS27-7-O/P

Attenuation and alteration of thymic epithelial cells and enhanced autoreactivity in cyclosporine A-treated rats

Yasushi Sawanobori, Yusuke Kitazawa, Hisashi Ueta, Kenjiroh Matsuno, Nobuko Tokuda

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3-C-WS27-8-O/P

Analysis and regulation of immune reaction in the transplantation from MHC homozygous donors to heterozygous recipients with minor antigen mismatches

Haruka Wada, Ryo Otsuka, Airi Sasaki, Muhammad Baghdadi, Ken-ichiro Seino

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3-C-WS27-9-P

Heparin can induce regulatory T cells independent of anticoagulant activity

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3-C-WS27-10-P

Immune responses in aged and diabetes mellitus occurred cynomolgus macaques

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3-C-WS27-11-P

Lymphocyte infiltration in a nonhuman primate transplantation model with various combinations of major histocompatibility complex

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3-C-WS27-12-O/P

Myeloid-Derived Suppressor Cells Increase and Inhibit Donor-Reactive T Cell Responses to Graft Intestinal Epithelium in Intestinal Transplant Patients

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3-C-WS27-13-O/P

Novel immune monitoring assay by minimizing the influence of immunosuppressants for living donor liver recipients by using humanized mouse model

Yasutomo Fukasaku, Ryoichi Goto, Yoshikazu Ganchiku, Masaaki Zaitsu, Masaaki Watanabe, Norio Kawamura, Tsuyoshi Shimamura, Akinobu Taketomi

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3-C-WS27-14-O/P

A new feature of regulatory T cells in human head and neck cancer

Takuma Matoba[1,2], Masaki Imai[1], Naganari Ohkura[3,4], Daisuke Kawakita[2], Kei Ijichi[2], Tatsuya Toyama[5], Akimichi Morita[6], Shingo Murakami[2], Shimon Sakaguchi[3], Sayuri Yamazaki[1]

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December 12

WS-28 Endogeneous innate immunity and inflammation-1: Endogenous innate immune response

3-D-WS28-1-O/P

GABARAP Autophagy Proteins Prevent the Caspase-11-Dependent Excess Inflammation and Lethal Endotoxic Shock

Miwa Sasai, Naoya Sakaguchi, Hironori Bando, Youngae Lee, Masahiro Yamamoto

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3-D-WS28-2-O/P

Inhibition of NLRP3 inflammasome-mediated IL-1β release by 1'-acetoxychavicol acetate (ACA), a ginger-derived compound

Sophia Ping Meow Sok[1,2,3], Daisuke Ori[1], Noor Hasima Nagoor[3,4], Taro Kawai[1]

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3-D-WS28-3-P

Elucidation of molecular mechanism of interleukin 33 release

Mizuka Nagayama, Takumi Kawasaki, Daisuke Ori, Taro Kawai

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3-D-WS28-4-P

A novel mutation of NLRP1 is involved in the pathogenesis of a rare disease with severe liver fibrosis

Taiki Ando[1,2], Akie Maehara[1], Tomoaki Ando[1], Kumi Izawa[1], Ayako Kaitani[1], Atsushi Tanabe[1], Keiko Maeda[1], Nobuhiro Nakano[1], Naoto Tamura[2], Ko Okumura[1], Jiro Kitaura[1]

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3-D-WS28-5-P

The role of metabolic activity of senescent cells in controlling cytokine gene expression

Shin-ichiro Takebayashi, Sadatsugu Ookuma, Masato Ogata

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3-D-WS28-6-P

The novel G58V mutation in the *TNFRSF1A* gene identified in a family with TNF Receptor-Associated Periodic Syndrome (TRAPS) decreases the cell surface expression of TNFR1

Shoko Tsuji[1], Tomoyuki Mukai[1], Kyoko Kawahara[1], Akiko Nagasu[1], Masanori Iseki[2], Yoshitaka Morita[1]

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3-D-WS28-7-O/P

Blau patient-derived iPS cells reveal gain-of-function mutation of NOD2 selectively impairs its ligand specific immune responses

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3-D-WS28-8-O/P

ZNFx abrogates Riplet-mediated polyubiquitination of RIG-I, leading to attenuation of type I interferon production during viral infection

Takahisa Kouwaki, Hirotake Tsukamoto, Hiroyuki Oshiumi

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3-D-WS28-9-P

RIG-I and MDA5 signaling contributes antioxidant response via enhancing NRF2 activation

Yuichi Kitai, Ryuta Muromoto, Jun-ichi Kashiwakura, Tadashi Matsuda

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3-D-WS28-10-P

Constitutive RIG-I Activation Causes Skin Lesion Resembling Psoriasis in Mice

Ahmed Samir Abu Tayeh[1)], Hiroki Kato[1,2)], Takashi Fujita[1,2)]

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3-D-WS28-11-P

Hyperglycemia is associated with psoriatic inflammation in both humans and mice

Mizuyu Odanaka[1)], Kyoko Ikumi[1,2)], Hiroaki Shime[1)], Masaki Imai[1)], Hiroaki Hemmi[3,4)], Tsuneyasu Kaisho[3,4)], Akimichi Morita[2)], Sayuri Yamazaki[1)]

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3-D-WS28-12-O/P

Ribonuclease T2 negatively regulates response of the dsRNA sensor TLR3

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3-D-WS28-13-P

Phospholipase A2 from Honey Bee Venom increases the Poly(I:C)-induced activation in Human Keratinocytes

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3-D-WS28-14-O/P

Identification of endogenous nitro-fatty acids as inhibitors of STING signaling

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3-D-WS28-15-O/P

TANK negatively regulates DNA triggered-STING signaling activation

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3-D-WS28-16-O/P

Multiple functions of CXCL14 in the CpG DNA transport into dendritic cells/macrophages for modulating Toll-like receptor 9 signaling

Takahiko Hara[1,2)]

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3-D-WS28-17-P

Parallel immunostimulation by the combination of DAMP-inducing- and PAMP-adjuvant

Tomoya Hayashi[1,2)], Takato Kusakabe[1,3)], Masatoshi Momota[1,3)], Etsushi Kuroda[1,3)], Ken J. Ishii[1,3)], Hidetoshi Arima[2,4)]

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December 12

WS-29 Endogeneous innate immunity and inflammation-2: Innate immune response and tissue repair

3-D-WS29-1-O/P

Phosphorylation and functional inactivation of Regnase-1 enhance target mRNA stability during IL-17-mediated inflammatory response

Hiroki Tanaka[1)], Yasunobu Arima[2)], Daisuke Kamimura[2)], Noriyuki Takahashi[3)], Kazuhiko Maeda[1,4)], Takashi Satoh[1,4)], Masaaki Murakami[2)], Shizuo Akira[1,4)]

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3-D-WS29-2-O/P

Metabolic control of Regnase-1 in colon epithelial regeneration

Yasuharu Nagahama[1,3)], Mayuko Shimoda[1,2)], Yuuki Kozakai[1,4)], Hiroki Tanaka[1,2)], Takashi Satoh[1,2)], Kazuhiko Maeda[1,2)], Shizuo Akira[1,2)]

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3-D-WS29-3-P

HMGB1 released from intestinal epithelia damaged by cholera toxin contributes to activation of mucosal DCs and induction of intestinal CTLs and IgA

Ayako Wakabayashi, Masumi Shimizu, Michiyuki Yonekawa, Eiji Shinya, Hidemi Takahashi

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3-D-WS29-4-O/P

TRAF5 maintains the expression level of TRAF2 in non-hematopoietic cells and exacerbates DSS-colitis in mice

Hai The Phung[1)], Hiroyuki Nagashima[1)], Shuhei Kobayashi[1)], Tomoaki Machiyama[1)], Atsuko Asao[1)], Yuko Okuyama[1)], Naoto Ishii[1)], Takanori So[1,2)]

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3-D-WS29-5-O/P

Intraluminally secreted extracellular vesicles from the intestinal epithelial cells in sepsis support mucosal healing

Eun Jeong Park[1)], Michael G Appiah[1)], Samuel Darkwah[1)], Zay Yar Soe[1)], Eiji Kawamoto[1,2)], Motomu Shimaoka[1)]

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3-D-WS29-6-P

Role of cystine/glutamate transporter (system x_c^-) in murine sepsis

Ayaka Kazama[1)], Masashi Ohtani[1)], Kazuyo Moro[2,3)], Naoko Watanabe[1)]

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3-D-WS29-7-O/P

Screening of microbiota involved in the suppression of hepatic steatosis from obesity-resistant $\gamma_c^{-/-}$Rag2$^{-/-}$ mice

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3-D-WS29-8-O/P

Recognition of phospholipids on dead cells via inhibitory C-type lectin receptor

Chihiro Motozono[1,2)], Toru Shimane[1)], Shota Torigoe[1)], Naoya Nishimura[1)], Sho Yamasaki[1,2)]

Department of Molecular Immunology, Research Institute for Microbial Diseases, Osaka University, Suita, Japan[1)], Laboratory of Molecular Immunology, Immunology Frontier Research Center, Osaka University, Suita, Japan[2)]

3-D-WS29-9-O/P

RBM7 licenses fibrosis development via regulating ncRNA decay and SatM recruitment

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3-D-WS29-10-P

Overexpression of mucin 5B protects against bleomycin-induced lung fibrosis

Kentaro Asayama[1,2], Tetsu Kobayashi[1,2], Masaaki Toda[1], Taro Yasuma[1], Kota Nishihama[1,3], Atsuro Takeshita[1,3], Kentaro Fujiwara[1,2], Toshiaki Totoki[1], Corina D'Alessandro-Gabazza[1], Esteban C Gabazza[1]

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3-D-WS29-11-P

Inhibition of hepatic stellate cell apoptosis by protein S exacerbates liver fibrosis

Toshiaki Totoki[1], Masaaki Toda[1], Taro Yasuma[1], Kota Nishihama[1,2], Atsuro Takeshita[1,2], Kentaro Fujiwara[1,3], Prince Baffour Tonto[1], Corina D'Alessandro-Gabazza[1], Esteban C Gabazza[1]

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3-D-WS29-12-P

Anti-inflammatory effect of Japanese honey on Lipopolysaccharide (LPS) induced lung inflammation in mice

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3-D-WS29-13-P

Effect of cigarette smoking on functions of LPS-induced lung neutrophil in mice

Yuki Hirano, Saki Hamada, Mayuna Uno, Minoru Takeuchi

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3-D-WS29-14-P

Effect of cigarette smoke extract on expressions of cell surface antigens on macrophage

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3-D-WS29-15-P

The critical role of Epigenetic regulation by Setdb2 in acute respiratory distress syndrome (ARDS) model

Shota Sonobe, Masahiro Kitabatake, Noriko Ouji-sageshima, Natsuko Imakita, Toshihiro Ito

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3-D-WS29-16-P

THE ROLE OF CTRP6 IN NEPHROPATHY DEVELOPMENT AND PROGRESSION

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December 12

WS-30 Cancer immunotherapy-2

3-E-WS30-1-O/P

Combined blockade of IL-6 and PD-1/PD-L1 signaling abrogates mutual regulation of their immunosuppressive effects in the tumor microenvironment

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3-E-WS30-2-O/P

Robust anti-tumor effect of the systemic co-administration of the alarmin HMGN1 with anti-PD-L1 antibody in mice

Chang-Yu Chen[1,2], Satoshi Ueha[1], Shoji Yokochi[1], Yoshiro Ishiwata[1], Haru Ogiwara[1], Shungo Deshimaru[1], Shiro Shibayama[3], Kouji Matsushima[1]

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3-E-WS30-3-P

A mouse model of combination immunotherapy for advanced and chemoresintant bladder cancer by using cancer-associated peptides vaccine and PD-1 blockade

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3-E-WS30-4-P

IL-18 augments anti-tumor effect of anti-PD-1 Ab in melanoma model mice

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3-E-WS30-5-P

Clinical implications of monitoring nivolumab immunokinetics in non–small cell lung cancer patients

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3-E-WS30-6-P

Immunological analysis of pleural effusion in cancer patients who received immune checkpoint inhibitors (ICI) for the development of biomarkers

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3-E-WS30-7-O/P

Depending on the genetic background anti-PD-L1 antibodies of the IgG2a subclass can enhance antitumor activity through depletion of intratumoral myeloid cells

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3-E-WS30-8-P

Compounds from *Leucopaxillus giganteus* inhibit the expression of immune checkpoint molecules in lung cancer cell

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3-E-WS30-9-O/P

Inhibition of vascular adhesion protein-1 enhances antitumor-effects of immune checkpoint inhibitors by reducing inflammatory tumor microenvironment

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3-E-WS30-10-P

Anti-CD4 antibody treatment inhibits lung metastasis of interferon γ-resistant mammary tumors in mice

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3-E-WS30-11-O/P

Antitumor effects of IL-27 against a mouse chronic myeloid leukemia model

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3-E-WS30-12-O/P

Anti-tumor immunity induced by gemcitabine in murine pancreas metastatic models is mediated by reduction of Gr-1+ cells and increment of cytocidal CD8+ T cells

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3-E-WS30-13-P

Identification of therapeutic-specific mutations induced by gemcitabine and nab-Paclitaxel in pancreatic cancer

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3-E-WS30-14-O/P

Chemotherapy-induced senescent cancer cells are good targets for T cell-based anti-cancer immunotherapy

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3-E-WS30-15-O/P

Mitomycin C-induced HTLV-1-infected cell death leads to enhanced phagocytosis by dendritic cells and macrophages compared to Doxorubicin-induced cell death

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Department of Immunotherapeutics, Tokyo Medical and Dental University, Tokyo, Japan

3-E-WS30-16-P

LPS preconditioning potently enhances liver antitumor activity in mice despite marked suppression of inflammatory response

Manabu Kinoshita[1)], Hiroyuki Nakashima[1)], Masahiro Nakashima[1)], Takuya Ishikiriyama[1)], Shoichiro Kato[1,3)], Hiyomi Miyazaki[4)]

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3-E-WS30-17-P

Continuous treatment with immune modulator can uniformize the effect of anti-tumor immunity

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December 12

WS-31 Cancer immunotherapy-3

3-E-WS31-1-O/P

Immunotherapy targeting effector Treg cells via heat shock protein 90

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3-E-WS31-2-O/P

Therapeutic potential of Tumor-infiltrating B Cells

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3-E-WS31-3-P

Anapocosis-inducing mAbs may be promising therapeutic device for cancer

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3-E-WS31-4-P

Identification of the synergistic cytotoxic activity of toward cancer cells using two mAb recognizing different epitopes via flow cytometric antibody-dependent cellular cytotoxicity assay

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3-E-WS31-5-O/P

Induction of antigen specific anti-tumor effect by *in vivo* dendritic cell-targeting novel cellular vaccine "NY-ESO-1 expressing artificial adjuvant vector cells (aAVC-NY-ESO-1)"

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3-E-WS31-6-O/P

Use of FLIPr as an antigen delivery vector for cancer immunotherapy

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3-E-WS31-7-P

A combination immunotherapy with an androgen antagonist and peptide induces effective anti-tumor responses

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3-E-WS31-8-O/P

Local delivery of CCL19-expressing mesenchymal stromal cells suppresses the tumor growth via promoting infiltration of immune cells

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3-E-WS31-9-O/P

A rapid and simple protocol for cDNA clonig of tumor antigen-specific TCR

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3-E-WS31-10-O/P

The development of antigen detection system using yeast surface display library

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3-E-WS31-11-P

Expansion of the antigen delivering technique with PEGylated liposomes to marginal zone B cells for immunization

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3-E-WS31-12-O/P

A Phase II study of α-Galactosylceramide-pulsed antigen presenting cells for advanced or recurrent non-small cell lung cancer

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3-E-WS31-13-P

Immunohistochemical analysis of immunopathological phenotype in three subtypes of breast cancer tissues

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3-E-WS31-14-P

Tumor infiltrating lymphocyte repertoire analysis of colon cancer

Kenta Sukegawa[1)], Hiroshi Hamana[2)], Kiyomi Shitaoka[2)], Eiji Kobayashi[3)], Shiori Saeki[1)], Takuya Nagata[1)], Tsutomu Fujii[1)], Atsushi Muraguchi[3)], Hiroyuki Kishi[3)]

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3-E-WS31-15-P

TCR repertoire analysis of peptide-specific T cells using immunospot array assay on a chip (T-ISAAC) technology

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December 12

WS-32 Mucosal-Skin Immunity-2

3-F-WS32-1-O/P

Lypd8 suppresses pathogenic bacteria attachment on intestinal epithelia

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3-F-WS32-2-P

Involvement of Paneth cell α-defensin misfolding in disease progression of SAMP1/YitFc, a murine model of Crohn's disease

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3-F-WS32-3-O/P

The anti-microbial peptide CRAMP is essential for colon homeostasis by maintaining microbiota balance

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3-F-WS32-4-P

The role of small GTPase ARF4 in intestinal epithelial cells

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3-F-WS32-5-O/P

Sox8 is essential for the differentiation of M cells and antigen-specific IgA response

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3-F-WS32-6-O/P

Osteoprotegerin-dependent M-cell self-regulation balances gut infection and immunity

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3-F-WS32-7-P

M-cell-dependent antigen uptake mitigates infectious colitis by shaping mucosal barrier function

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3-F-WS32-8-P

Roles of enteric neurons in gut mucosal immunity

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3-F-WS32-9-O/P

Intestinal epithelial cell-derived IL-15 supports the homeostasis of intraepithelial lymphocytes

Yuanbo Zhu, Guangwei Cui, Akihiro Shimba, Shinya Abe, Takahiro Hara, Shizue Tani-ichi, Koichi Ikuta

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3-F-WS32-10-P

AP-1B-dependent sorting of basolateral membrane protein is required for maintenance of intestinal intraepithelial lymphocytes

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3-F-WS32-11-P

Notch-mediated final differentiation of TCR$\gamma\delta^{+}$CD8$\alpha\alpha^{+}$ intraepithelial lymphocytes in the small intestine

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3-F-WS32-12-P

Involvement of CD206^{+} cells in oral mucosal tolerance

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3-F-WS32-13-P

BATF2-mediated suppression of IL-23p19 production by macrophages prevents development of spontaneous colitis

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3-F-WS32-14-O/P

Suppression of IL-17F, but not of IL-17A, provides protection against colitis by inducing T_{reg} cells through modification of intestinal microbiota

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3-F-WS32-15-O/P

Colonic Tregs migrated from inflamed colon proliferate in draining lymph node. Simultaneous detection of cellular movement and proliferation

Michio Tomura[1)], Mizuki UEDA[1)], Ryoyo IKEBUCHI[1,2)], Taiki MORIYA[1)], Ippei YASUDA[1)], Yutaka KUSUMOTO[1)]

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3-F-WS32-16-O/P

Microbiota-dependent and -independent induction of colonic regulatory T cells by butyrate

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3-F-WS32-17-P

Combinatorial treatment of ampicillin and vancomycin induces colitis due to metabolic disorders and impaired epithelial barrier function in the gut

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December 12

WS-33 Mucosal-Skin Immunity-3

3-F-WS33-1-O/P

An applicational study of a novel developed method BarBIQ: analysis of microbiota in different locations of a murine cecum

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3-F-WS33-2-P

Effects of gut microbiota disturbance at early life on colonic mucosal immune cells

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3-F-WS33-3-O/P

The disturbance of maternal microbial environment affects the intestinal immune development in offspring

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3-F-WS33-4-O/P

Gut microbial metabolite acetate tunes IgA reactivity toward commensal microbes to maintain mucosal homeostasis

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3-F-WS33-5-O/P

Induction of IFNγ-producing CD8 T cells by human derived-commensal bacteria

Takeshi Tanoue[1,2)], Ashwin Skelly[1)], Satoru Morita[1)], Seiko Narushima[1,2)], Koji Atarashi[1,2)], Kenya Honda[1,2)]

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3-F-WS33-6-O/P

Role of immunoglobulin A in the altered gut microbiota associated with obesity and insulin resistance

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3-F-WS33-7-P

Mannose dependent binding of Glycoprotein 2-IgA immunoadhesin to the bacterial flagellar protein FimH

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3-F-WS33-8-P

IL-21 and CD4$^+$ T cells are required for Peyer's patch germinal center formation but not for intestinal IgA in homeostatic condition

Masaaki Hashiguchi, Yuji Kashiwakura, Yumiko Kanno, Hidefumi Kojima, Tetsuji Kobata

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3-F-WS33-9-P

The role of Peyer's patches in producing maternal IgA antibodies

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3-F-WS33-10-O/P

Impaired salivary SIgA antibodies elicit oral dysbiosis and subsequent induction of alveolar bone loss

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3-F-WS33-11-O/P

Pathogenic activity of secretory IgA in lung fibrosis

Maho Suzukawa[1)], Sayaka Arakawa[1,2)], Koichi Kobayashi[1,2)], Hideaki Nagai[1)], Takahide Nagase[2)], Shigeto Tohma[1)], Ken Ohta[1)]

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3-F-WS33-12-O/P

DAO controls IgA production through both T cell dependent and independent pathway

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3-F-WS33-13-P

Innovative prime-boost vaccine method strongly induces both systemic and mucosal immunity

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3-F-WS33-14-P

Structure-activity relationship of surfactants as mucosal adjuvants

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December 12

WS-34 Tumor immunity-1: Tumor Microenvironment and Immune Suppression

3-G-WS34-1-O/P

Role of cancer cell-derived HMGB1 in tumor progression

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3-G-WS34-2-O/P

Identification of a host factor for the improvement of immune checkpoint blockade therapy for hepatocellular carcinoma

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3-G-WS34-3-O/P

Roles of ganglioside GD3 in the regulation of microenvironment of gliomas

Pu Zhang[1,2)], Okiru Komine[4)], Yuki Ohkawa[2)], Yuhsuke Ohmi[2)], Robiul H Bhuiyan[2)], Akira Kato[3)], Koji Yamanaka[4)], Keiko Furukawa[3)], Toshihiko Wakabayashi[3)], Tetsuya Okajima[1)], Koichi Furukawa[1,2)]

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3-G-WS34-4-O/P

Tumor suppressors of the DAPK family regulate anti-tumor innate immunity through the STING-type I Interferon pathway

Mariko Takahashi[1)], Chan-Wang J Lio[1)], Martin Steger[2)], Matthias Mann[2)], Sonia Sharma[1)]

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3-G-WS34-5-O/P

Evaluation of interleukin 34 in the tumor microenvironment of hepatocellular carcinoma

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3-G-WS34-6-P

The impact of IL-34 on survival in cancer patients: in silico study

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3-G-WS34-7-O/P

L-34 promotes metastasis in a murine model of ovarian cancer

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3-G-WS34-8-P

The expression and functional analysis of V-set and immunoglobulin domain-containing 4 (VSIG4) in myelodysplastic syndromes and chronic myelomonocytic leukemia

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3-G-WS34-9-P

Blocking FSTL1 abolishes immunoresistance of osteosarcoma

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3-G-WS34-10-P

Positive prognostic value of indoleamine 2,3-dyoxygenase (IDO) as a biomarker for nivolumab in acral and mucosal melanoma

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3-G-WS34-11-P

Imatinib mesylate induced antitumor effect by increased infiltration of effector T cells in tumor

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3-G-WS34-12-P

Enhanced expression of HLA-F is critically related with tumor malignancy

Noriko Ouji-sageshima[1)], Akiko Ishitani[2)], Daniel E Geraghty[3)], Natsuko Imakita[1)], Shota Sonobe[1)], Masahiro Kitabatake[1)], Toshihiro Ito[1)]

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3-G-WS34-13-O/P

Involvement of CD300a in the tumor growth

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3-G-WS34-14-O/P

***CyclinJ* as a Novel Regulator in Modulating Tumor-associated Macrophage**

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3-G-WS34-15-P

Valproic acid attenuates the immunosuppressive function and migration capacity of myeloid-derived suppressor cells, limiting tumor progression

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3-G-WS34-16-P

Langerhans cells regulate tumor-associated T cell responses in primary cutaneous melanoma by histological analysis

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3-G-WS34-17-P

Role of lymph node stromal cells in immunosuppression during cancer progression

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3-G-WS34-18-P

Expression of C3/C3b and CD59 associated with aging in lung of mouse

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3-G-WS34-19-P

The TLR3/TICAM-1 signal constitutively controls spontaneous polyposis through suppression of c-Myc in *Apc*$^{Min/+}$mice

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3-G-WS34-20-P

An antigen-dependent route of CTL infiltration into tumor tissues

Toshihiro Komatsu[1)], Ryosuke Iwade[2)], Takehito Sato[3)], Keiko Udaka[1)]

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3-G-WS34-21-P

Molecular mechanism of Metformin-induced anti-tumor immunity

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December 12

WS-35 Tumor immunity-2: Effectore cells in Tumor Immunity

3-G-WS35-1-O/P

A new mode of cancer-specific CTL responses against an HLA-A24 peptide encoded by a long non-coding RNA

Yasuhiro Kikuchi, Takayuki Kanaseki, Serina Tokita, Toshihiko Torigoe

Sapporo Medical University, Sapporo, Japan

3-G-WS35-2-P

Unique and immunogenic peptides are presented by HLA class I of tapasin-deficient cancer

Taro Kikuchi, Takayuki Kanaseki, Serina Tokita, Toshihiko Torigoe

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3-G-WS35-3-P

Presence of upstream proline inhibits HLA class I antigen presentation and thereby attenuates CD8+ T-cell responses

Ayumi Hongo, Takayuki Kanaseki, Serina Tokita, Toshihiko Torigoe

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3-G-WS35-4-O/P

Molecular imaging of the hCD19 CAR signalosomes, "CAR microclusters"

Noriko Yanase[1)], Hiroaki Machiyama[1)], Ei Wakamatsu[1)], Hiroko Toyota[1)], Masae Furuhata[1)], Kikumi Hata[1)], Maksim Mamonkin[2)], Malcolm K Brenner[2)], Tadashi Yokosuka[1)]

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3-G-WS35-5-P

WT1 specific CTL expansion using antigen presentingcell line and IMid

Sara Ogawa[1)], Tastuya Suwabe[2)], Yasuhiko Shibasaki[1)], Wakana Goto[1)], Masayoshi Masuko[2)], Takayoshi Uchiyama[3)], Shigeo Hashimoto[4)], Jun Takizawa[2)], Hirohito Sone[2)], Masuhiro Takahashi[1)], Miwako Narita[1)]

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3-G-WS35-6-P

Clonally expanded populations of cytotoxic T cell in tumor infiltrated lymphocyte and peripheral blood in uterine endometrial cancer

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3-G-WS35-7-P

Establishment and analysis of renal cell carcinoma reactive tumor-infiltrating T cell

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3-G-WS35-8-P

Variable gene repertoirome analysis of peripheral blood BCRs and CD4+ TCRs (α/β) for qualitative evaluation of cancer-associated immune response

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3-G-WS35-9-O/P

Sipa1 deficiency unleashes a host-immune mechanism eradicating chronic myelogenous leukemia-initiating cells

Yan Xu[1,2)], Satoshi Ikeda[1)], Kentaro Sumida[1)], Ryusuke Yamamoto[1,2)], Hiroki Tanaka[1)], Nagahiro Minato[1,2)]

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3-G-WS35-10-P

Blockade of suppressor of cytokine signaling 3 enhances anti-tumor immunity

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3-G-WS35-11-P

The role of UDP-glucose ceramide glucosyltransferase in T cells in tumor immunity

Remi Furukawa[1)], Masaki Nagane[1)], Shoichiro Miyatake[2)], Mariko Okamoto[3)], Kikumi Ogiwara[4)], Tadashi Yamashita[1)]

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3-G-WS35-12-O/P

Induction of tumor-specific CD8+ CTLs from naïve human T cells by *Mycobacterium*-derived mycolic acid and lipoarabinomannan-stimulated dendritic cells

Hidemi Takahashi[1)], Yuji Tomita[1,2)], Eri Watanabe[1)], Masumi Shimizu[1)], Yukihiro Kondo[2)]

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3-G-WS35-13-O/P

Regulation of CCL5 expression by Runx/CBFβ transcription factor complexes and long-distance enhancers

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3-G-WS35-14-O/P

Distinct transcriptional regulation in tumor-infiltrating regulatory T cells

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3-G-WS35-15-O/P

Immunogenic tumor cell death accelerates tumor infiltrating dendritic cell migration and leads to tumor regression

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3-G-WS35-16-O/P

IL-6-deficient condition augments anti-tumor effector cells and facilitates the efficacy of cancer immunotherapy

Hidemitsu Kitamura[1], Yosuke Ohno[2], Yujiro Toyoshima[1,2], Huihui Xiang[1,2], Shinichi Hashimoto[3], Kazuho Ikeo[4], Shigenori Homma[2], Hideki Kawamura[2], Norihiko Takahashi[2], Akinobu Taketomi[2]

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3-G-WS35-17-P

Periodical measurement of IFN production as a way make prognostic predictions for cancer patients

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3-G-WS35-18-P

AROMATIC POLYMER LIGNIN MAY INHIBIT CANCER CELL PROLIFERATION VIA ACTIVATION OF APOPTOTIC PATHWAYS

Rio Kashimoto[1], Eriko Ohgitani[2], Tatsuya Miyazaki[3], Takashi Watanabe[5], Osam Mazda[6], Chihiro Kimura[4]

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December 12

WS-36 Bacterial / mycofungal / parasite infection

3-H-WS36-1-O/P

***Porphyromonas gingivalis* negatively regulates host immune responses through inhibitory receptor, Siglec**

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3-H-WS36-2-P

Contribution of iNKT cells to the clearance of *Pseudomonas aeruginosa* from skin wounds

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3-H-WS36-3-P

The critical role of IL-21$^+$ NKT cells in the formation of germinal center B cells by a protein-based pneumococcal vaccine

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3-H-WS36-4-P

Effect of CARD9 deficiency on the neutrophil-mediated host defense to pneumococcal infection: a comparative analysis with Dectin-2

Shigenari Ishizuka[1)], Rin Yokoyama[1)], Aya Umeki[1)], Keiko Ishii[1)], Shinobu Saijo[2)], Yoichiro Iwakura[3)], Hiromitsu Hara[4)], Kazuyoshi Kawakami[1)]

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3-H-WS36-5-O/P

The IL-6/Mincle axis in immature myeloid cells is critical to protect against severe invasive group A *Streptococcus* infection

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3-H-WS36-6-P

Identification of innate immune receptor for the mycobacterial virulence factor phenolic glycolipid

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3-H-WS36-7-O/P

Mycolic acid induces the suppression of host immune responses through inhibitory receptors

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3-H-WS36-8-O/P

A molecular mechanism of inflammasome suppression by mycobacterial virulence factor

Giichi Takaesu[1,2)], Tomomi Kurane[2)], Masayuki Umemura[1,2)], Goro Matsuzaki[1,2)]

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3-H-WS36-9-P

Effects of mycobacteria-derivedzinc-dependent metalloprotease-1 (Zmp1) on innate and T-cell immune responses

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3-H-WS36-10-P

Induction of antigen 85B-specific CD8$^+$ T cells by recombinant BCG protects against mycobacterial infection

Shihoko Komine-Aizawa[1)], Satoru Mizuno[2)], Satoshi Hayakawa[1)], Kazuhiro Matsuo[2)], Mitsuo Honda[1)]

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3-H-WS36-11-P

New format interferon gamma release assay for the diagnosis of latent tuberculosis infection

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3-H-WS36-12-P

Interleukin-22-mediated host glycosylation prevents *Clostridium difficile* infection via modulating the luminal metabolism of the gut microbiota

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3-H-WS36-13-O/P

Interplay between diet and gut microbiota mediates colonization resistance against *Clostridium difficile*

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3-H-WS36-14-P

Impaired adaptive immunity to *Listeria monocytogenes* in non-diabetic obese mice

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3-H-WS36-15-P

Pyroptosis enhances killing of *Listeria monocytogenes* by ampicillin in vivo

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3-H-WS36-16-P

Culture supernatants of coagulase-negative Staphylococci induce apoptosis of lung epithelial cells

Masaaki Toda[1)], Tetsu Kobayashi[2)], Taro Yasuma[1)], Prince Baffour Tonto[1)], Kota Nishihama[1,3)], Atsuro Takeshita[1,3)], Toshiaki Totoki[1)], Kentaro Fujiwara[1,2)], Corina D'Alessandro-Gabazza[1)], Isaac Cann[1)], Esteban C Gabazza[1)]

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3-H-WS36-17-O/P

Analysis of novel *Shigella* effector mechanism that regulate host cell death

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3-H-WS36-18-P

Chlamydia trachomatis modulates mitochondrial dynamics via the elevation of cAMP and the downregulation of Drp1-activity, resulting in creating favorable conditions for chlamydia growth

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3-H-WS36-19-P

FABP deficiency protects against *Chlamydia pneumoniae* infection-induced hepatic steatosis

Toshinori Soejima, Kazunari Ishii, Bin Chou, Yusuke Kurihara, Ryota Ito, Kenji Hiromatsu

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3-H-WS36-20-P

Development of an oral biofilm-associated disease vaccine using membrane vesicles from *Streptococcus mutans*

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3-H-WS36-21-P

Genetic susceptibility to Mycoplasma pneumoniae infection among inbred mouse strains

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3-H-WS36-22-P

Pioglitazone prevents sepsis in old mice by enhancing liver innate immunity

Masahiro Nakashima, Hiroyuki Nakashima, Manabu Kinoshita, Takuya Ishikiriyama, Shoichiro Kato, Shuhji Seki

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3-H-WS36-23-P

Role of Dectin-2 in actin polymerization and phagocytosis of *Cryptococcus neoformans* by dendritic cells

Yuki Kitai[1)], Hiromi Hirata[1)], Keiko Ishii[1)], Hiromitsu Hara[2)], Shinobu Saijo[3)], Yoichiro Iwakura[4)], Sho Yamasaki[5)], Kazuyoshi Kawakami[1)]

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3-H-WS36-24-P

Exploration of a novel T cell antigen of *Candida albicans* against oral candidiasis

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3-H-WS36-25-P

Immunosuppressive receptor, Siglec5 recognizes lipophilic ligands extracted from pathogenic fungus, *Trichophyton mentagrophytes*

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3-H-WS36-26-P

Recognition of budding yeast by a C-type lectin gene and its roles in host defense to fungal infection

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3-H-WS36-27-O/P

RIFINs of *Plasmodium falciparum* target multiple inhibitory receptors for immune evasion

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3-H-WS36-28-P

Preferential response of Vγ1$^+$$\gamma\delta$ T cells to *Plasmodium berghei* infection

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3-H-WS36-29-P

The effect of LPS preconditioning on the lethal malaria infection

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3-H-WS36-30-P

Group 2 innate lymphoid cells directly exacerbate amebic liver abscess regardless of the host defense via IFN-γ

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3-H-WS36-31-P

TRAF6 in dendritic cells regulates innate immune control of *Toxoplasma gondii*

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3-H-WS36-32-P

The role of adipocyte lipid chaperone FABP4 in *Trypanosoma cruzi* infection

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3-H-WS36-33-P

Alteration of type 2 immune responses against nematode parasites in the gut of aged mice

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3-H-WS36-34-P

ILC2s in *Strongyloides venezuelensis*-experienced mice contribute to the resistance against *Nippostrongylus brasiliensis* infection

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3-H-WS36-35-P

Time and location of the blockade on mucosal penetration by infective larvae; another immune defense against a gastrointestinal nematode re-infection

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3-H-WS36-36-P

Suppression of type 1 diabetes in mice infected with an intestinal nematode

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3-H-WS36-37-P

Distinct roles of Th2 cytokines in anti-arthritic effects of *Schistosoma mansoni*

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3-H-WS36-38-P

Listeria and Toxoplasma exploit host gateway reflex to enter the CNS

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3-H-WS36-39-P

The influence of maternal inflammation by bacterial infection on fetal brain development

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3-H-WS36-40-P

BST-1/CD157 negatively regulates marginal zone B cell survival and Ab production induced with Toll-like receptor stimulation

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3-H-WS36-41-P

Genome sequencings of opportunistic pathogens that cause serious diseases in immunocompromised mice

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December 12

WS-37 Human Immunology: Pathogenesis and Immunointervention

3-H-WS37-1-O/P

APRIL deficiency as a cause of common variable immunodeficiency

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3-H-WS37-2-P

ATYPICAL SIFD PATIENT WITHOUT SIDEROBLASTIC ANEMIA WITH NOVEL TRNT1 MUTATIONS: STUDIES ON MOLECULAR PATHOGENESIS OF B CELL DEFICIENCY AND PERIODIC FEVER

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3-H-WS37-3-P

A case of neonatal-onset proteasome-associated autoinflammatory syndrome resembling but distinct from Nakajo-Nishimura syndrome

Noriko Kinjo[1)], Hiroyuki Mishima[2)], Akira Kinoshita[2)], Koh-Ichiro Yoshiura[2)], Tsunehiro Mizushima[3)], Jun Hamazaki[4)], Shigeo Murata[4)], Hiroaki Hemmi[5)], Tsuneyasu Kaisho[5)], Nobuo Kanazawa[6)]

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3-H-WS37-4-O/P

Analysis of mice carrying a novel mutation in a proteasome subunit gene identified in an autoinflammatory disease patient

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3-H-WS37-5-O/P

Identification of *POGLUT1* as the effector gene in human primary biliary cholangitis (PBC) susceptibility locus chromosome 3q13.33

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3-H-WS37-6-O/P

*HLA-B*39:01* is a modifier of Familial Mediterranean Fever (FMF) in Japanese population

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3-H-WS37-7-P

Immune-suppressed characteristics with increased Treg marker and decreased perforin expression by CTL in patients with mesothelioma compared with diffuse pleural thickening

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3-H-WS37-8-P

Deregulated mucosal immune-surveillance through gut-associated Tregs and PD1$^+$T cells in human colorectal cancer

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3-H-WS37-9-O/P

High-dimensional immune cell profiling in CMV anterior uveitis cases reveals an NK population non-responsive against CMV pp65

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3-H-WS37-10-P

JAK inhibitor baricitinib modulates human innate and adaptive immune system

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3-H-WS37-11-P

Bortezomib treatment induces a higher mortality rate in lupus model mice with a higher disease activity

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3-H-WS37-12-P

RORγt antagonist suppresses Sjögren's syndrome like sialadenitis in RORγt-transgenic mice

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3-H-WS37-13-P

Inhibition of ERK enhances CuD-induced anti-tumor effect on adult T-cell leukemia (ATL) cells

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3-H-WS37-14-O/P

A new humanized mouse model to investigate large granular lymphocytosis in CML patients and immune-modulating effects of dasatinib

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3-H-WS37-15-P

A urinary biomarker candidate for chronic rejection after kidney transplantation

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3-H-WS37-16-P

Effects of aging and radiation exposure on leukocyte telomere length and associated biomarkers among atomic-bomb survivors

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3-H-WS37-17-P

Circulating levels of soluble TIM-4 in the patients with asthma

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3-H-WS37-18-P

Specific detection of human NK cell mediated in vivo ADCC in FcgR-deficient NOG-human IL-15 transgenic mice

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3-H-WS37-19-P

Novel strategy to acquire MHC-I binding screening free ligand peptide

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3-H-WS37-20-P

Genetic perturbation of immunological gene expression in T cells under different polarizing conditions

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3-H-WS37-21-P

Humanized mouse as a model of human pregnant immunity

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3-H-WS37-22-O/P

Human NK cell development in hIL-7 and hIL-15 knock-in NOD/SCID/IL2rgKO mice

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3-H-WS37-23-P

Generation of humanized transchromosomic mice expressing fully human antibody using a mouse chromosome-derived novel artificial chromosome (NAC) vector system

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3-H-WS37-24-P

The construction of functional human-type artificial lymphoid tissues

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