Objectives: We attempted to identify specific biomarkers to distinguish AOSD from sepsis.

Methods: We measured serum levels of 45 cytokines in 66 AOSD patients, 17 sepsis patients and 133 age-matched controls by multi-suspension cytokine array. Japan College of Rheumatology-certified rheumatologists diagnosed with AOSD based on the Yamaguchi criteria. Cytokines were ranked by their importance by a multivariate classification algorithm. We performed a logistic regression analysis to determine specific biomarkers for discriminating AOSD from sepsis patients. To identify specific molecular networks, we performed a cluster analysis of each cytokine.

Results: Serum fibroblast growth factor 2 (FGF-2), vascular endothelial growth factor (VEGF), granulocyte-colony stimulating factor (G-CSF), and IL-18 levels were significantly elevated in the AOSD group versus the sepsis group. Multivariate classification algorithms followed by a logistic regression analysis revealed that the measurement FGF-2 distinguished AOSD patients from sepsis patients with the highest accuracy (cut-off value=28.5 pg/mL, sensitivity 100%, specificity 88.2%, accuracy 96.7%).

Abstract OP0084 – Table 1

variables (AOSD vs sepsis)	sensitivity	specificity	accuracy	AUC	AIC
FGF-2	1.000	0.882	0.967	0.972	24.50
IL-18	0.930	0.824	0.900	0.895	50.90
G-CSF	0.837	0.706	0.800	0.721	75.30
FGF-2 + IL-18	0.977	0.941	0.967	0.986	21.70

Conclusions: We have demonstrated that FGF-2 can be the best biomarker for differential diagnosis between AOSD and sepsis based on the measurement of multiple cytokines. Although the differential diagnosis between rheumatic diseases and infectious conditions is a great challenge in clinical practice, these findings help to improve the diagnostic performance of AOSD in daily practice.

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OP0085

SAFETY OF LONG-TERM (UP TO 6 YEARS) CANAKINUMAB THERAPY (<2, 2–<4 AND 4–<8MG/KG) IN PATIENTS AGED <4 TO 65 YEARS FROM BETA-CONFIDENT REGISTRY

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Background: The β -confident registry (NCT01213641), a multicenter, long-term (6 years; yrs), prospective, observational study has demonstrated the safety and effectiveness of canakinumab (CAN) in real life CAPS patients (pts) according to their phenotypes.¹ Here we report long-term safety of CAN in pts with CAPS and other autoinflammatory syndromes, enrolled in the β -confident registry, according to their age and dose administered.

Objectives: To monitor the long-term safety of different CAN doses (<2, 2–<4 and 4–<8 mg/kg) across different age groups (<4 to 65 years) in pts with CAPS and other autoinflammatory syndromes.

Methods: Cumulative safety data were reported as exposure adjusted incidence rate per 100 pt-years (IR/pyr) from the enrollment of the first pt (November 2009) until end of study (December 2015). Pts were followed up for at least 1 year. The protocol did not mandate any visits or procedures. All observed and reported AEs and SAEs were recorded for the following age groups:<4-, 4–<12-, 12–<18-, 18–<65 and $\geq$ 65 years.

Results: Of the 285 pts enrolled, 21% (n=60) discontinued the study mainly due to loss of follow-up (35%, n=21) followed by AEs (10%, n=6), poor efficacy (8%, n=5) and pt preference (3%, n=2). In total, 1114 AEs and 155 SAEs were reported in 223 pts (110.7 IR/100 pyr) and 83 pts (15.4 IR/100 pyr), respectively. Exposure adjusted incidence rate of AEs (IR/100 pyr) among pts in the <4 and 4–<12 year age group, were lowest in the pts who received <2 mg/kg dose (130.3 and 59.7, respectively) compared to pts who received 2–<4 mg/kg (450.8 and 169.6, respectively) and 4–<8 mg/kg (121.5 and 90.0, respectively) CAN dose. In pts

aged 12–<18 years, IR/100 pyr were lowest in pts who received 2–<4 mg/kg dose (118.2) compared to pts who received <2 mg/kg (169.6) and 4–<8 mg/kg (139.4) CAN dose. Similarly, in the 18–<65 year age group, IR/100 pyr were lowest in pts who received <2 mg/kg dose (93.1) compared to pts who received 2–<4 mg/kg (100.7) and 4–<8 mg/kg (154.4) CAN dose. In the $\geq$ 65 year age group, IR/100 pyr decreased with increase in dose (<2 mg/kg: 26, 2–<4 mg/kg: 17). Overall, 5, 13, 19, 84 and 7 SAEs were reported in <4-, 4–<12-, 12–<18-, 18–<65 and $\geq$ 65 year age groups, respectively. One death (metastatic rectal adenocarcinoma in a 76-yr-old MWS patient) was reported.

Conclusions: The β -confident registry is the largest CAPS cohort documented in a registry. In general, incidence of adverse events in each dose group increased with age (<4–<65 years). However, no meaningful pattern of AEs was observed with increased dose for each age group. Long-term treatment with canakinumab demonstrated favourable safety profile which was similar to that reported earlier² and is well tolerated in CAPS patients aged <4 to 65 years.

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OP0086

LONG-TERM EFFICACY AND SAFETY OF ADALIMUMAB BY IMMUNOSUPPRESSANT USE IN PATIENTS WITH NON-INFECTIOUS UVEITIS IN THE VISUAL III TRIAL

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Objectives: To evaluate the long-term safety and efficacy of adalimumab in patients with non-infectious intermediate, posterior, or panuveitis, by immunosuppressant (IMM) use.

Methods: Adult patients who completed or had a treatment failure in the VISUAL I/II trials were eligible to enter the Phase III open-label extension study, VISUAL III. Patients received adalimumab 40 mg every other week in VISUAL III, and interim follow-up data were collected through Weeks 0 to 78. Efficacy measures assessed included proportion of patients with: no active inflammatory lesions in both eyes; anterior chamber (AC) cell grade $\leq$ 0.5 + in both eyes; vitreous haze (VH) grade $\leq$ 0.5 + in both eyes; quiescence (defined as no active inflammatory lesions AND AC cell grade $\leq$ 0.5 + AND VH grade $\leq$ 0.5+); and steroid-free quiescence. Mean steroid dose and mean best corrected visual acuity (BCVA) were also assessed. Missing data were imputed using non-responder imputation for categorical endpoints, last observation carried forward for continuous variables, and as-observed for steroid dose. Efficacy was analysed by IMM (methotrexate, cyclosporine, mycophenolate mofetil, or azathioprine) use. Adverse events (AEs) were reported from first adalimumab dose in VISUAL III through interim cut-off date of Oct 31, 2016, with analysis by IMM use.

Results: Of 371 patients included in the intent-to-treat analysis, 117 (31.5%) were using IMM at VISUAL III baseline (BL) and 30 (8.1%) started IMM during VISUAL III. The proportion of patients with quiescence improved over time irrespective of IMM use; compared with Week 0, 95% confidence intervals were non-overlapping at most time points (figure 1). Numeric improvements were achieved in steroid-free quiescence, steroid dose reduction, and BCVA, with no difference by IMM use. No new safety signals were detected through 130 weeks of treatment and AE rates were generally consistent with previous VISUAL trials; some AEs, notably serious infections and malignancies, were slightly higher with concomitant IMM use.