

Supplementary table 1: Tocilizumab dosing regimen used for all patients receiving Tocilizumab

	Patient weight	sJIA / MAS	pJIA	TA / Vasculitis
Intravenous ¹ route	< 30kg	12mg/kg every 2 weeks	10mg/kg every 4 weeks	12mg/kg every 2-4 weeks
	≥ 30kg	8mg/kg (max. 800mg) every 2 weeks	8mg/kg (max. 800mg) every 4 weeks	8mg/kg (max. 800mg) every 2-4 weeks
Subcutaneous ² route	< 30kg	162mg every 2 weeks (patients ≥ 1 year and ≥ 10kg)	162mg every 3 weeks (patients ≥ 2 years and ≥ 10kg)	162mg every 2-3 weeks (patients ≥ 2 years and ≥ 10kg)
	≥ 30kg	162mg weekly	162mg every 2 weeks	162mg every 1-2 weeks

1. Summary of Product Characteristics –RoActemra 20mg/ml Concentrated Solution for Infusion. Roche Products Ltd. Accessed via <https://www.medicines.org.uk/emc>
2. Summary of Product Characteristics –RoActemra 162mg Solution for Injection Pre-filled syringe. Roche Products Ltd. Accessed via <https://www.medicines.org.uk/emc/>

sJIA, systemic juvenile idiopathic arthritis; MAS, Macrophage Activation Syndrome; pJIA, polyarticular juvenile idiopathic arthritis; TA, Takayasu Arteritis

Supplementary table 2: Bivariate analysis of outcome (clinically inactive disease at 3 months) in those with or without macrophage activation syndrome at presentation.

Fisher's exact test p= 0.6288

	CID at 3 months	No CID at 3 months	Total
Suspected MAS at presentation	17	10	27
No suspected MAS at presentation	27	22	49
Total	44	32	76

Supplementary table 3: Bivariate analysis of outcome (clinically inactive disease at 12 months) in those with or without macrophage activation syndrome at presentation.

Fisher's exact test p= 0.1455

	CID at 12 months	No CID at 12 months	Total
Suspected MAS at presentation	19	8	27
No suspected MAS at presentation	25	24	49
Total	44	32	76

Supplementary table 4: Bivariate analysis of outcome (clinically inactive disease at last review) in those with or without macrophage activation syndrome at presentation.

Fisher's exact test p= 1.0

	CID at last review	No CID at last review	Total
Suspected MAS at presentation	24	3	27
No suspected MAS at presentation	43	6	49
Total	67	9	76