

Table S1 Summary of thirteen cases of hemophagocytic syndrome (HLH) associated with *Cytomegalovirus* (CMV) (HLH-CMV) in immunocompetent adults

Case	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13
Sex	Female	Male	Male	Male	Female	Male	Female	Female	Female	Female	Male	Female	Male
Age (years)	39	34	18	71	47	72	32	31	52	70	21	48	36
CMV-related symptoms	Pneumonia	Jaundice	Pneumonia	Pneumonia, Joint pain, Rash	Pneumonia, Myalgia, Jaundice	Pneumonia	Rash	Rash					
Fever	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Splenomegaly	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Platelet count	78 000 uL ⁻¹	155 k/mm ³	1.1 lac/cumm	42×10 ⁹ L ⁻¹	187×10 ⁹ L ⁻¹	169 000 mL ⁻¹	46 000 μL ⁻¹	16×10 ⁹ L ⁻¹	24 000 /mm ³	107 000 IU/μL	81×10 ⁹ L ⁻¹	96×10 ⁹ L ⁻¹	22×10 ⁹ L ⁻¹
Hemoglobin	8.5 g/dL	8.5 g/dL	9.5 gm%	9.4 g/dL	12.6 g/dL	9.7 g/dL	8.8 g/dL	7.8 g/dL	6.7 g/dL	12.2 g/dL	13.5 g/dL	6.1 g/dL	10 g/dL
Treatment	Ganciclovir, Steroids	Ganciclovir, Etoposide	Ganciclovir, Etoposide	Ganciclovir, Etoposide	Ganciclovir, Steroids	Ganciclovir, Steroids	Immuno-globulin	Steroids, Immuno-globulin	Ganciclovir	Ganciclovir, Steroids, Cyclosporin	Cyclosporin	Ganciclovir, Steroids	Ganciclovir
Hospitalisation time	58 d	Unknown	Unknown	14 d	21 d	26 d	15 d	49 d	Unknown	28 d	14 d	47 d	Unknown
Outcome	Recovered	Died	Recovered	Died	Recovered	Recovered	Recovered	Recovered	Recovered	Recovered	Died	Died	Recovered
Reference	Bonnet et al., 2017	Elliott et al., 2022	Singh et al., 2020	Jain et al., 2016	Halfon et al., 2009	Patil et al., 2020	Hot et al., 2008	Miao et al., 2020	Mun et al., 2013	García-Montoya et al., 2017	Tsuda and Shirono, 1996	Atim-Oluk, 2013	Chevalier et al., 2023

References

- Atim-Oluk M, 2013. Cytomegalovirus associated haemophagocytic lymphohistiocytosis in the immunocompetent adult managed according to HLH-2004 diagnostic using clinical and serological means only. *Eur J Microbiol Immunol (Bp)*, 3(1):81-89.
<https://doi.org/10.1556/EuJMI.3.2013.1.12>
- Bonnecaze AK, Willeford WG, Lichstein P, et al., 2017. Acute cytomegalovirus (CMV) infection associated with hemophagocytic lymphohistiocytosis (HLH) in an immunocompetent host meeting all eight HLH 2004 diagnostic criteria. *Cureus*, 9(3):e1070.
<https://doi.org/10.7759/cureus.1070>
- Chevalier K, Schmidt J, Coppo P, et al., 2023. Hemophagocytic lymphohistiocytosis associated with cytomegalovirus infection: 5 cases and a systematic review of the literature. *Clin Infect Dis*, 76(2):351-358.
<https://doi.org/10.1093/cid/ciac649>
- Elliott RP, Freeman BP, Meier JL, et al., 2022. Acute cytomegalovirus illness in an immunocompetent adult causing intravascular hemolysis and suspected hemophagocytic lymphohistiocytosis. *Case Rep Infect Dis*, 2022:7949471.
<https://doi.org/10.1155/2022/7949471>
- García-Montoya L, Sáenz-Tenorio CN, Janta I, et al., 2017. Hemophagocytic lymphohistiocytosis in a patient with Sjögren's syndrome: case report and review. *Rheumatol Int*, 37(4):663-669.
<https://doi.org/10.1007/s00296-016-3601-5>
- Halfon P, Retornaz F, Mathieu D, et al., 2009. Virus-associated hemophagocytic syndrome related to acute CMV and HBV sexual co-infection: a case report. *J Clin Virol*, 46(2):189-191.
<https://doi.org/10.1016/j.jcv.2009.07.001>
- Hot A, Madoux MHG, Viard JP, et al., 2008. Successful treatment of cytomegalovirus-associated hemophagocytic syndrome by intravenous immunoglobulins. *Am J Hematol*, 83(2):159-162.
<https://doi.org/10.1002/ajh.21008>
- Jain P, Al Salihi SA, Hasbun R, et al., 2016. Disseminated cytomegalovirus-associated hemophagocytic lymphohistiocytosis in an elderly patient. *Blood Res*, 51(4):288-290.
<https://doi.org/10.5045/br.2016.51.4.288>
- Miao SX, Wu ZQ, Xu HG, 2020. Systemic autoimmune abnormalities complicated by cytomegalovirus-induced hemophagocytic lymphohistiocytosis: a case report. *World J Clin Cases*, 8(20):4946-4952.
<https://doi.org/10.12998/wjcc.v8.i20.4946>
- Mun JI, Shin SJ, Yu BH, et al., 2013. A case of hemophagocytic syndrome in a patient with fulminant ulcerative colitis superinfected by cytomegalovirus. *Korean J Intern Med*, 28(3):352-355.
<https://doi.org/10.3904/kjim.2013.28.3.352>
- Patil SM, Beck PP, Patel TP, et al., 2020. Cytomegalovirus pneumonitis-induced secondary hemophagocytic lymphohistiocytosis and SIADH in an immunocompetent elderly male literature review. *IDCases*, 22:e00972.
<https://doi.org/10.1016/j.idcr.2020.e00972>
- Singh A, Chauhan A, Padole V, et al., 2020. The great masquerader: hemophagocytic lymphohistiocytosis

secondary to cytomegalovirus infection in an immunocompetent young man. *J Family Med Prim Care*, 9(7):3762-3765.

https://doi.org/10.4103/jfmpe.jfmpe_274_20

Tsuda H, Shirono K, 1996. Successful treatment of virus-associated haemophagocytic syndrome in adults by cyclosporin a supported by granulocyte colony-stimulating factor. *Br J Haematol*, 93(3):572-575.

<https://doi.org/10.1046/j.1365-2141.1996.d01-1707.x>