

Table 1: Summary of 25 case reports of SLE & Lupus like syndromes arising during IFN- α therapy

Age (yrs) /Sex	Indication /IFN- α Dosage	Duration of IFN Rx	Clinical findings/Other labs /Biopsy	ANA titers/ Auto Antibodies	ACR Criteria
(3)/23/ F	Malignant Carcinoid Tumor/6 MU/day	46 wks	Arthralgia, Arthritis, Myalgia/ WBC: 3.3	ANA 1:400/Anti ds-DNA	4
(4)/19/M	CML/NR ^a	4 Yrs	Arthralgia, Arthritis, Malar rash, Fever/Lymphopenia, UA: Proteinuria ↓ Complements/Skin biopsy: LCV	ANA 1:9270/Anti ds-DNA	>4
(7)/50/F	Malignant Melanoma /3-9 MU, 3*/wk	NR	Arthralgia, Arthritis/Skin biopsy	ANA 1:3200/Anti ds-DNA	3 criteria & supportive skin biopsy
(5)/35/F	CML/NR	3 Yrs	Arthralgia, Arthritis, Malar rash, Fever, Headache / Skin biopsy: Drug eruption	ANA 1:200/Anti-Sm	4
(6)/10/M	JLP/3 MU/m2/day	7 Yrs	Anasarca, Splenomegaly/Anemia, UA:+ve blood, Proteinuria, Arthritis, ↓ Complements/Renal biopsy: DPLN	ANA 1:2500/Anti ds-DNA	3 criteria & supportive. renal biopsy
(2)/26/ M	CML/4 MU/day (+IFN- γ 50 μ g /day)	NR	Arthralgia, Arthritis, Discoid rash, Raynaud's/WBC: 2.3	ANA 1:1000000 /NR	4
(2)/40/F	CML/3 MU/day (+IFN- γ 50 μ g/day)	NR	Arthralgia, Arthritis, / Hemolytic Anemia, WBC: 3.5	ANA 1:256 /NR	3
(2)/NR	Myeloproliferative disorder /NR	NR			Lupus like syndrome
(2)/NR	Myeloproliferative disorder /NR	NR			SLE
(8)/31/F	CML/10 MU/day	60 wks	Arthralgia, Arthritis, Rash, Fever, Hair loss, Photosensitivity/Hemolytic Anemia	ANA 1:640/NR	4
(8)/15/F	CML/NR	4 wks	Arthralgia, Arthritis, Oral ulcers, Fever, Head ache, Hair loss ,Photosensitivity	ANA 1:640/NR	4
(9)/72/M	HCV/NR	NR	NR/Renal Biopsy	ANA: +ve/Anti ds-DNA, LE Cells	2 criteria & supportive Renal biopsy
(10)/59/F	Sjogren's Syndrome /7MU 3*/wk	2 wks	Arthralgia, Arthritis, Discoid rash, Oral ulcers, Hair loss, Lymphadenopathy, Photosensitivity/Skin Biopsy: SLE	ANA 1:1280/Anti-SSA, Anti-SSB	>4
(21) /NR	NR				Lupus like syndrome
(20)/24/F	HCV/NR	32wks	Arthralgia, Arthritis, Fever, Urticaria	ANA: +ve /Anti ds-DNA	3
(11)/69/M	HCV/9MU 3*/wk	24 wks	Arthralgia, Arthritis ,Myalgia, Dyspnea, Pleural effusion/Lymphopenia	ANA: 1:2560 / Anti ds-DNA, LE Cells,	>4
(12)/37/F	HCV/3MU 3*/wk	44 wks	Arthralgia, Myalgia, Bullous skin lesions, Depression /↓ Complements	ANA: 1:2560 /Anti ds-DNA, Anti Nucleosome	2
(1)/44/M	HBV/HCV/NR	14 wks	Arthralgia, Arthritis, Myalgia, Oral ulcers ,Fever, Weight loss, Photosensitive rash, Pleural Effusion, Lymphadenopathy/ Hb:10.6g/dl, WBC:4.0, UA:+ve blood casts, Proteinuria, Cryoglobulin:+ve, ↓ C3 & C4/Renal biopsy: III Lupus GN, Skin biopsy: Perivascular mononuclear cell infiltrates	ANA:1:640 /Anti ds-DNA, Anti-Histones, Anti-SSA, Anti-RNP, p-ANCA	>4
(13)/16/F	Giant Cell Lesion of Maxilla /3 MU/m2/day	64 wks	Malar rash, Pleural & Pericardial effusion/↓C3	ANA: 1:80 /anti ds-DNA	4
(14)/53/F	HCV /Cryoglobulinemic vasculitis/3 MU 3*/ wk	40 wks	Arthralgia, Oral ulcers, Photosensitive malar rash/ WBC: 3.8, ↓ C3 & C4/ Skin Biopsy: LCV	ANA: +ve /Anti-SSA	>4
(15)/55/M	HCV, Liver Transplant/Peg. IFN- α : 1.1 μ g/kg/wk	44 wks	Arthralgia, Arthritis, Pleural & Pericardial effusion	ANA:1:1280/Anti ds-DNA, P-ANCA	4
(18)/43/M	HCV/NR	NR	Arthritis, Oral ulcers, Discoid rash, Glomerulonephritis, Serositis /Lymphopenia	ANA: +ve/Anti ds-DNA	>4
(17)/47/M	HIV, HBV, HCV and Hemophilia/NR	56 wks	Truncal rash, Hair loss / UA: +ve Blood, Proteinuria, ↓C3, & C4, CRP +ve /Renal biopsy: IV Lupus nephritis Skin biopsy: Lichenoid reaction	ANA: 1:1280/Anti ds-DNA	3 criteria & supportive. Renal biopsy
(16)/18/F	HBV/Peg. IFN- α : 160 μ g/wk	32 wks	Arthralgia, Photosensitive malar rash /↓ C3 & C4, CRP +ve	ANA: 1:1000/Anti-Histone	4
(19)/33/NR	HCV, Hemodialysis/3MU 3*/wk	16 wks	Arthralgia, Arthritis, Myalgia, Fatigue/Hb: 6.3g/dl, WBC: 8.4, Thrombocytopenia	ANA: 1:1600/Anti ds-DNA, Anticardiolipin	4
(Current) 50/M	HCV/Peg. IFN- α : 180 μ g/wk	24wks	Arthralgia, Photosensitive malar rash, Weight loss, Raynaud's, Fever/Anemia, WBC: 2.1-3.6 with lymphopenia	ANA:7.50/Anti ds-DNA Anti-SSA	>4

^a Not Reported (NR);

+ve,elevated above normal range but not quantified;ANA,titer of antinuclear antibodies;Anti ds-DNA,titer of anti-double stranded DNA antibodies;Anti-Sm,titer of anti Smith antibodies;Anti-SSA,titer of anti-SSA antibodies;Anti-SSB,titer of anti-SSB antibodies;Anti-Histones,titer of anti- Histone antibodies;Anti RNP, titer of anti Ribonucleoprotein antibodies;p-ANC,titer of Peripheral anti-neutrophil cytoplasmicantibodies;Anti-Nucleosome,titer of anti-Nucleosome antibodies;WBC, white blood cell count given in thousands per mm³;LE cell,Lupus Erythematosus cell preparation;Proteinuria >0.5 g or 3+ protein if not quantified; MU/m2/d, million units per meter square per day;MU million units, μ g/wk micro gram per week;UA,Urine analysis;CRP,C-reactive proteins;Hb hemoglobin;CML,Chronic myeloid leukemia;LCV,leukocytoclastic vasculitis;JLP,Juvenile laryngeal papillomatosis;DPLN,diffuse proliferative Lupus nephritis;HCV,Hepatitis C virus;HBV Hepatitis B virus; Peg,IFN- α Pegylated IFN- α