Pegylated-Interferon as an alternative to interferon-alfa 2a in Cutaneous T-Cell lymphoma



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Purpose/Objectives:

- Pegylated-interferon has now replaced interferon-alfa 2a, which is no longer available in the UK, for patients with cutaneous T-cell lymphoma (CTCL) refractory to skin directed therapy.
- We present our experience of treating 12 CTCL patients with pegylated-interferon.

Materials and Methods:

 A retrospective review of patients with CTCL from November 2019 to June 2021 treated with pegylated-interferon at a cancer centre in the UK.

Results:

- 12 patients were analysed (Table 1)
- Patients generally tolerated treatment well and their side effects are summarised in Table 2.
- Seven patients received interferon alpha 2a prior to pegylated-interferon.
- Two patients were converted directly and demonstrated an improved response. There were no significant differences in side effects and response was maintained.
- At 4 months; 6 patients demonstrated a partial clinical response, 4 patients stable disease and 2 patients progressive disease.

Patient Cohort		
N	12	
Age	48-84 years old	
Stage	IB- IIB	
Prior Treatment	PUVA UV-B Gemcitabine Bexarotene Total Skin Electron Beam therapy Localised radiotherapy Topical steroids Retinoids	
Dose	 135mcg pegylated interferon for all patients 4 patients escalated to 180mcg 1 patient dose reduced to 90mcg due to weight loss 	
Duration of treatment	1-17mths (6 patients remain on treatment)	
Median time to response	42 days	
4 month Clinical Response	6 patients – partial repsonse 4 patients – stable disease 2 patients – progressive disease	

Table 1: Patient cohort baseline and treatment characteristics

Patient	Interferon alfa	Peg-interferon
1	Nil recorded	Hot Flushes, Shedding and Thinning of Hair (Fully recovered and continued treatment)
2	Flu-like symptoms	Less bruising and soreness to injection sites due to reduced frequency, Itching associated with pollen, Coryzal symptoms
3	Flu-like symptoms	Nil reported
4	Nil reported	Hearing loss (resolved with ear drops for wax)
5	Headaches	Nil reported
6	Light-headed, Sickly, Diarrhoea, Palpitations, Breathlessness	Lethargy, Reduced appetite, Flu-like symptoms, Stomach pains, Bowel disturbance, Dizziness, Breathlessness, ?Rash- boils
7	Flu-like symptoms, Loose stools	Tinnitus, Poor appetite (both recovered quickly)
8	N/A	Flu-like symptoms, Tiredness, Mild coryzal symptoms
9	N/A	Fatigue, Night sweats
10	N/A	Headache, Abdominal Cramp, Diarrhoea x2/day
11	N/A	Flu-like symptoms, Fatigue, Abdominal pains.
12	N/A	Nil reported

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Table 2: Side effects patients experienced on pegylated-interferon

Conclusion:

 The substitution of Pegylated-interferon for alpha interferon was associated with a high response rate with no evidence of additional toxicity