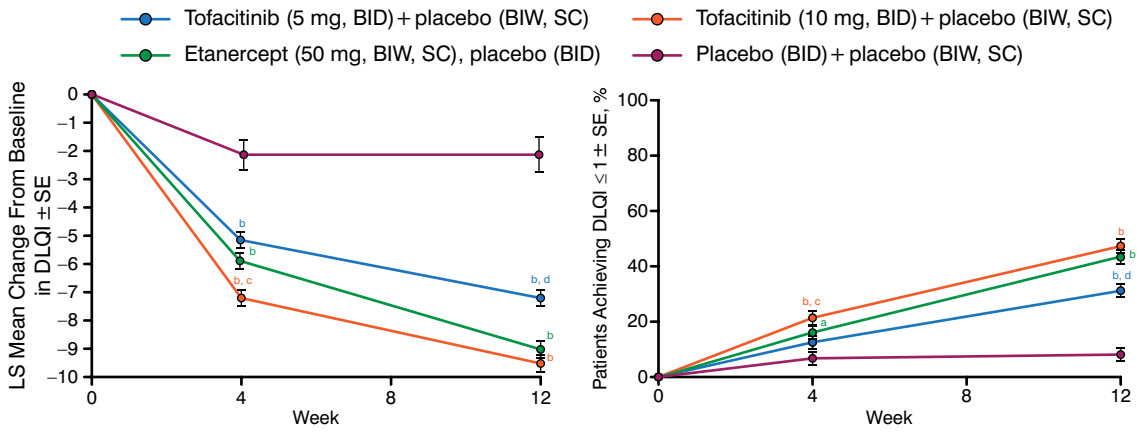
Figure 2. Dermatology Life Quality Index Score Improved With Tofacitinib



BIW, twice weekly; DLQI, Dermatology Life Quality Index; LS, least squares; SC, subcutaneous; SE, standard error.

[a]$P<.05$ vs placebo; [b]$P<.0001$ vs placebo; [c]$P<.05$ vs etanercept; [d]$P<.0001$ vs etanercept.

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patients with baseline DLQI > 1, significantly more patients receiving active treatment reported DLQI ≤ 1 (no effect of psoriasis on QOL) vs placebo ($P<.0001$).

From week 4, significantly more patients receiving active treatment reported a PtGA of "clear" or "almost clear" versus those receiving placebo ($P<.0001$). More than 50% of patients receiving tofacitinib (10 mg) or etanercept achieved a PtGA of "clear" or "almost clear." More than 70% of patients receiving active treatment were satisfied with their treatment at week 12, as assessed by the PSSM.

The results of this study demonstrated that patients treated with tofacitinib (5 or 10 mg, BID) exhibited significant improvement across multiple measures of health-related QOL when compared with placebo. These results suggest that oral tofacitinib may be an effective new treatment option for patients with moderate to severe chronic plaque psoriasis.

PIONEER II: Adalimumab Reduces Disease Activity in Patients With HS

Written by Maria Vinall

Hidradenitis suppurativa (HS) is a chronic, painful skin disease for which there is currently no approved treatment. Results from the Efficacy and Safety Study of Adalimumab in the Treatment of Hidradenitis Suppurativa [PIONEER II; NCT01468233] presented by Gregor Jemec, MD, University of Copenhagen, Roskilde, Denmark, show that patients with moderate-to-severe HS who are treated with adalimumab experience a clinically relevant reduction in objective disease activity and pain after 12 weeks.

HS is characterized by recurrent inflamed nodules, abscesses, and fistulas predominantly in the axillary, inguinal, and breast folds and the anogenital regions [Kurzen H et al. *Exp Dermatol.* 2008]. Adalimumab has been shown to alleviate moderate-to-severe symptoms and pain [Kimball A et al. *Ann Intern Med.* 2012] and improve treatment satisfaction among patients with HS [Jemec GB et al. *J Invest Dermatol.* 2014].

PIONEER II was a 12-week, phase 3, placebo-controlled trial designed to evaluate the safety and efficacy of adalimumab versus placebo in patients with moderate-to-severe HS. Subjects (n = 326) with a diagnosis of HS for ≥ 1 year, a total abscess and inflammatory nodule count ≥ 3, HS lesions in ≥ 2 body areas (1 at Hurley stage II or III), and no prior tumor necrosis factor–α–inhibitor treatment were randomized 1:1 to adalimumab (40 mg weekly after a loading dose of 160 mg at week 0 and 80 mg at week 2) or matching placebo.

The primary efficacy measure was HS Clinical Response (HiSCR; defined as ≥ 50% reduction from baseline in abscess and inflammatory nodule count, and no increase in abscess or draining fistula counts) at week 12. Patients (about 66% women) had a mean age of about 35 years, mean duration of disease of about 11 years, and mean numeric rating scale skin pain (worst in the prior 24 hours) of 4.5.

At 12 weeks, the HiSCR rate was significantly higher for patients treated with adalimumab (58.9%) compared with those receiving placebo (27.6%; $P<.001$). The effect was seen as early as week 2 and sustained to week 12.

Among patients with Hurley stage II, significantly more adalimumab-treated patients had an abscess and inflammatory nodule count of 0, 1, or 2 (adalimumab 51.8% vs placebo 32.2%; $P \leq .01$). The effect was seen at week 2 and sustained throughout time.

Among patients with a baseline numeric rating scale for pain ≥3, significantly more adalimumab-treated patients had a 30% reduction and ≥1 unit reduction in the Patients' Global Assessment of Skin Pain numerical rating scale based on 24-hour recall of worst pain (adalimumab 45.7% vs placebo 20.7%; $P < .001$). Adalimumab-treated patients also achieved a significantly greater mean reduction from baseline in modified Sartorius score (adalimumab –28.9 vs placebo –9.5; $P < .001$).

At least 1 treatment-emergent adverse event (TEAE) was reported by 57.7% of adalimumab-treated patients and 66.9% of placebo-treated patients. TEAEs reported by ≥5% of adalimumab-treated patients were headache (12.9% of patients) and nasopharyngitis and diarrhea (5.5% each). There were no deaths. Prof Jemec concluded that AEs were comparable to the placebo group and consistent with the safety profile of adalimumab.

DL-PDT Not Inferior to c-PDT in Patients With AK

Written by Jill Shuman

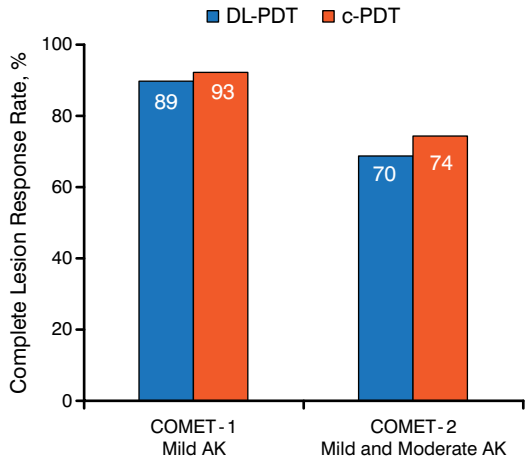
Rolf-Markus Szeimies, MD, PhD, Klinikum Vest Academic Teaching Hospital, Recklinghausen, Germany, discussed the rationale for using methyl aminolevulinate cream (MAL) and exposure to sunlight (daylight photodynamic therapy [DL-PDT]) as an alternative for MAL and conventional photodynamic therapy (c-PDT) to treat actinic keratoses (AKs). Although AKs of the scalp and face respond very well to c-PDT, the procedure is associated with pain and inconvenience [Rubel DM et al. *Br J Dermatol.* 2014; Kennedy JC, Pottier RH. *J Photochem Photobiol B.* 1992]. Previously published data from a series of studies [Wiegell SR et al. *Br J Dermatol.* 2012; Wiegell SR et al. *Br J Dermatol.* 2011; Wiegell SR et al. *Br J Dermatol.* 2009; Weigell SR et al. *Br J Dermatol.* 2008] and an international consensus paper [Wiegell SR et al. *J Eur Acad Dermatol Venereol.* 2012] all suggest that even in Scandinavian countries, DL-PDT is an effective, safe, and more convenient alternative to MAL-PDT as a treatment for many people with AKs.

Prof Szeimies reviewed data from the Intra-individual Comparison of Efficacy and Safety of Metvix Natural Daylight Photodynamic Therapy Versus Conventional Metvix Photodynamic Therapy in Subjects With Mild Actinic Keratoses trial [COMET-1; Rubel DM et al. *Br J Dermatol.* 2014] and the Phase 3b Study of Metvix NDL-PDT Versus Metvix c-PDT in Subjects With Actinic Keratoses [COMET-2; NCT01821391]. Both were randomized, phase 3, noninferiority studies of patients with mild (COMET-1) or mild-to-moderate (COMET-2) AKs.

COMET-1 included 100 Australian adults, and COMET-2 included 108 European patients. In both trials, patients were randomized to a single treatment of DL-PDT to either side of the face and c-PDT plus sunscreen to the other side. They were all followed for an initial 12 weeks; lesions that responded completely after the first 12 weeks were then followed for an additional 12 weeks. The primary efficacy outcome was complete AK lesion response rate per side at week 12. The primary safety end point was the self-reported pain assessment using the Visual Analog Scale (VAS) just after the treatment session at the baseline visit.

In both trials, the majority of patients were men. All were white with a mean age ranging from 67 to 73 years. The mean number of lesions on both sides at baseline in COMET-1 was 14, and it was 9 in COMET-2. At week 12, DL-PDT was noninferior to c-PDT in either trial (Figure 1). In COMET-1, 97% of the lesions that had completely responded at week 12 remained clear after 24 weeks; data were not presented for COMET-2. Prof Szeimies noted that DL-PDT was effective in either sunny or cloudy weather, with a similar rate of complete lesion response at 3 months after 1 session, but emphasized that the procedure will not be successful in rainy weather.

Figure 1. Primary Efficacy End Point at Week 12



AK, actinic keratosis; c-PDT, conventional photodynamic therapy; DL-PDT, daylight photodynamic therapy.

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