Summary of evidence for minocycline in conditions other than Acne – requested by consultant dermatologists

Vitiligo

British Association of Dermatologists Guidelines for diagnosis and management of vitilgo 2008

No reference to minocycline (or other tetracycline) for management of vitiligo

Cochrane Review – Interventions for vitiligo 2015

Identified 1 RCT (n=50) of minocycline vs dexamethasone for vitiligo. Found no difference in disease activity score.

Pyoderma gangrenosum

Br Med J 2015 350:h3175 doi: 10.1136/bmj.h3175. Treatment of Pyoderma gangrenosum

No reference to minocycline, but concludes there remains little evidence for any recommended treatment, partly because trials of rare diseases are challenging.

Rosacea

Cochrane Review – Interventions for rosacea 2015

Of the comparisons assessing oral treatments for papulopustular rosacea there was moderate quality evidence that tetracycline was effective but this was based on two old studies of short duration. Physician-based assessments in two trials indicated that doxycycline appeared to be significantly more effective than placebo (RR 1.59, 95% CI 1.02 to 2.47 and RR 2.37, 95% CI 1.12 to 4.99) (high quality evidence). There was no statistically significant difference in effectiveness between 100 mg and 40 mg doxycycline, but there was evidence of fewer adverse effects with the lower dose (RR 0.25, 95% CI 0.11 to 0.54) (low quality evidence).

There was very low quality evidence from one study (assessed at high risk of bias) that doxycycline 100 mg was as effective as azithromycin. Low dose minocycline (45 mg) was effective for papulopustular rosacea (low quality evidence).

Folliculitis decalvans

British Association of Dermatologists 2018 Information for patients – Folliculitis declavans

Treatment is usually a combination of a medicated shampoo, antiinflammatory and antibacterial scalp solutions or creams and oral antibiotics, including combinations of oral antibiotics. Steroid cream/lotion/ointment applications are often used. There is no specific treatment licensed for folliculitis decalvans, and because the condition is so rare, no clinical trials exist that prove the benefit of any particular therapy over another. The majority of treatments have only been tested in small numbers of patients or described in case reports.

Bullous pemphigoid

British Association of Dermatologists Guidelines for the management of bullous pemphigoid 2012

Anti-inflammatory antibiotics and nicotinamide:

(strength of recommendation D; level of evidence 4) Recommended for mild or localised disease, or with potent topical steroids in moderate disease.

Antibiotics with anti-inflammatory - effects are used widely in the treatment of BP. Mostly

doxycycline is used in the U.K. (40%), followed by minocycline (31%) and lymecycline (19%). Minocycline has a worse side-effect profile

and is therefore not the first choice of antibiotic. A few cases of minocycline-associated pneumonia and eosinophilia have been described, necessitating immediate withdrawal. Lymecycline has a beneficial side-effect profile and has been successfully used by some dermatologists (408 mg twice daily) in the U.K. without published evidence. When blister formation is suppressed sufficiently the antibiotics and nicotinamide must be reduced slowly, one at a time, over several months to avoid relapse

Cochrane Review – Interventions for bullous pemphigoid 2015

The effectiveness of adding plasma exchange, azathioprine or mycophenolate mofetil to corticosteroids, and combination treatment with tetracycline and nicotinamide needs further investigation.