of skin is removed from the dorsal area of a SCID mouse to engraft a skin equivalent set up with tumour or normal keratinocytes. To date, we have obtained fast-growing and massively invasive tumours with one cSCC keratinocyte population. We are currently using this model to test whether the specific PLK1 inhibitors identified in vitro are efficacious with topical application in vivo.

094 Ultraviolet B-dependent changes in the expression of fast-responding early genes is modulated by huCOP1 in keratinocytes
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Ultraviolet (UV) B is the most prominent physical carcinogen in the environment leading to the development of various skin cancers. We have previously demonstrated that the human orthologue of the Arabidopsis thaliana constitutive photomorphogenesis (COP)1 protein, huCOP1, is expressed in keratinocytes in a UVB-regulated manner and is a negative regulator of p53 as a post-translational modifier. However, it was not known whether huCOP1 plays a role in mediating the UVB-induced early transcriptional responses of human keratinocytes. In this study we found that stable small-interfering (si) RNA-mediated silencing of huCOP1 affects the UVB response of several genes within 2 h of irradiation indicating that altered huCOP1 expression sensitizes the cells toward UVB. Pathway analysis identified a molecular network in which 13 out of the 30 examined UVB-regulated genes were organized around three central proteins. As the expression of the investigated genes was upregulated by UVB in the siCOP1 cell line, we hypothesize that huCOP1 is a repressor of the identified pathway. Several members of the network have been implicated previously in the pathogenesis of nonmelanoma skin cancers; therefore, clarifying the role of huCOP1 in these skin diseases may have clinical relevance in the future.

095 Contribution of collagen XIII and XXIII to squamous cell carcinoma development
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Collagens are important not only as structural components but also by regulating cell behaviour. Our work addresses the roles of the structurally homologous collagens XIII and XXIII in skin tumour formation. Both collagens are transmembrane pro-