

Table I. Empirical measurements relevant to epidermal organization

Quantitative estimates	Explanation of estimates and literature references
53/1	Ratio of nucleated epidermal cells to Langerhans cells (Bauer <i>et al</i> , 2001)
75,346 cells	Average number of nucleated epidermal cells per mm ² (Bauer <i>et al</i> , 2001)
93,124 cells	Average number of total epidermal cells per mm ²
1394 Langerhans cells	Average number of Langerhans cells per mm ² (Bauer <i>et al</i> , 2001)
73,952 cells	Average number of non-Langerhans cells per mm ² (Bauer <i>et al</i> , 2001)
36/1	Ratio of nucleated epidermal cells to melanocytes (Quevedo <i>et al</i> , 1974)
1999 melanocytes	Average number of melanocytes per mm ²
900 μm ²	Average surface area of human corneocyte in μm ² (Corcuff <i>et al</i> , 1991; Plewig and Jansen, 1997)
16 layers	Average number of layers in human stratum corneum (Grove and Kligman, 1983; Hoath and Leahy, 2002)
1111 corneocytes per mm ²	Number of corneocytes per layer per mm ²
1.15 layer per day	Average number of layers of corneum formed per day (Johannesson and Hammar, 1978)
14 d	Average turnover time for human stratum corneum (Rothberg <i>et al</i> , 1961; Weinstein and Van Scott, 1965; Jansen <i>et al</i> , 1974)
21 h	Average time for formation/desquamation of one corneum layer
17,778 corneocytes	Average total number of corneocytes per mm ²
0.0147 cells per mm ² /s	Average cellular rate of formation of stratum corneum (Human)
0.027 cells per mm ² /s	Cellular rate of formation of dorsal stratum corneum (late fetal rat) (Hoath <i>et al</i> , 1993)
5.3 h per layer	Average rate of stratum corneum formation (late fetal rat) (Hoath <i>et al</i> , 1993)
8 h per layer	Rate of stratum corneum formation (neonatal rat) (Hoath <i>et al</i> , 1993)

