

Table S3. Number of lifetime NB-UVB exposures estimated to result in skin cancer after **60** years of the same annual sun exposure, in relation to MED and sun behaviour habits, based on Δ -mutation burden/dose mutation burden in buttock and/or forearm skin for each subject plotted against their MED.

Attitude to sun exposure	Cautious	Typical	Enthusiastic
Annual sun exposure to trunk and limbs	10 SED	30 SED	90 SED
NB-UVB MED on buttock J/cm ² (SED in parentheses)	Number of NB-UVB exposures (95% CI in parentheses)		
0.2 (1.1)	362 (277 - 481)	148 (123 - 198)	53 (41 - 71)
0.3 (1.7)	453 (371 - 549)	184 (153 - 218)	66 (54 - 79)
0.35 (2.0)	525 (437 - 605)	214 (187 - 240)	77 (67 - 88)
0.4 (2.3)	618 (549 - 687)	252 (229 - 274)	91 (83 - 101)
0.5 (2.9)	922 (908 - 937)	376 (370 - 383)	135 (133 - 137)
0.6 (3.4)	1504 (1284 - 1721)	613 (534 - 750)	220 (197 - 254)
0.7 (4.0)	2682 (1844 - 3559)	1092 (821 - 1403)	393 (301 - 535)
0.8 (4.6)	5227 (2939 - 9737)	2128 (1296 - 3485)	766 (494 - 1340)
0.9 (5.1)	11132 (4806 - 29527)	4533 (2234 - 10009)	1632 (756 - 3227)
1.0 (5.7)	25918 (10326 - 86855)	10554 (3456 - 28504)	3799 (1436 - 11507)

Table S4. Number of lifetime NB-UVB exposures estimated to result in skin cancer after **40** years of the same annual sun exposure, in relation to MED and sun behaviour habits, based on Δ -mutation burden/dose mutation burden in buttock and/or forearm skin for each subject plotted against their MED.

Attitude to sun exposure	Cautious	Typical	Enthusiastic
Annual sun exposure to trunk and limbs	10 SED	30 SED	90 SED
NB-UVB MED on buttock J/cm ² (SED in parentheses)	Number of NB-UVB exposures (95% CI in parentheses)		
0.2 (1.1)	479 (295 - 492)	210 (117 - 193)	78 (39 - 71)
0.3 (1.7)	598 (372 - 579)	262 (148 - 228)	98 (56 - 79)
0.35 (2.0)	693 (437 - 618)	304 (178 - 256)	113 (67 - 94)
0.4 (2.3)	816 (554 - 686)	358 (230 - 279)	133 (84 - 101)
0.5 (2.9)	1218 (909 - 940)	534 (370 - 382)	199 (133 - 138)
0.6 (3.4)	1986 (1294 - 1762)	871 (542 - 731)	324 (187 - 259)
0.7 (4.0)	3541 (1916 - 3552)	1552 (868 - 1536)	578 (286 - 515)
0.8 (4.6)	6901 (3103 - 9628)	3025 (1259 - 3825)	1127 (447 - 1319)
0.9 (5.1)	14699 (4541 - 26541)	6443 (1928 - 10182)	2400 (946 - 3790)
1.0 (5.7)	34221 (9336 - 55443)	15000 (3062 - 29520)	5587 (1298 - 10841)