

## Supplementary figure S1

### 1. OXIDATIVE STRESS

	Markers	DAY 1	DAY 4
Expression levels	4HNE	MP,UV,DEE,O <sub>3</sub>	MP,UV,DEE
	SESN2	MP,DEE,CS,O <sub>3</sub> ,UV	O <sub>3</sub> ,CS,MP,DEE,UV

### 2. DNA DAMAGE

	Markers	DAY 1	DAY 4
Expression levels	8-OHdG	CS,DEE,UV,MP,O <sub>3</sub>	UV,MP,DEE,CS,O <sub>3</sub>

### 3. SKIN AGING

	Markers	DAY 1	DAY 4
Expression levels	MMP2	x	UV,CS,O <sub>3</sub> ,MP,DEE
	Type I Collagen	MP,DEE	DEE,UV,MP

### 4. INFLAMMATION (INFLAMMASOMES ACTIVATION)

	Markers	DAY 1	DAY 4
Gene expression	NLRP3	CS	UV
	NLRP1	O <sub>3</sub> ,CS	UV,CS,MP,DEE,O <sub>3</sub>
	NLRC4	UV,CS	x
	NLRP6	O <sub>3</sub> ,CS	UV,MP,CS,DEE,O <sub>3</sub>
Expression levels NLRs	NLRP3	DEE	x
	NLRP1	O <sub>3</sub> ,UV,CS,MP,DEE	CS,O <sub>3</sub> ,UV,DEE
	NLRC4	UV	x

	NLRP6	O <sub>3</sub> ,MP,CS,UV	O <sub>3</sub>
Colocalization NLRs-ASC	NLRP3-ASC	x	DEE,MP
	NLRP1-ASC	MP,DEE,CS	O <sub>3</sub> ,UV,DEE,CS,MP
	NLRC4-ASC	x	x
	NLRP6-ASC	x	x
Protein expression levels	ASC	UV,CS,O <sub>3</sub> ,DEE	MP,CS,DEE,UV
	p30-Gasdermin D	O <sub>3</sub> ,UV, MP,	CS,UV,MP, O <sub>3</sub> ,DEE
	IL-1 $\beta$	O <sub>3</sub> ,MP	UV,DEE,MP

**Figure S1.** List of the environmental pollutants affecting markers of oxidative stress, DNA damage, skin aging and inflammasomes components in human skin biopsies after one day (DAY 1) or 4 days (DAY 4) of exposure. The order of the environmental pollutants is listed in a decreasing manner, starting from the one with the major impact (red) to the one with the lowest effect on the mentioned markers. The “x” means no impact from any air pollutants.