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# Outreach note of the study report 20E5078 SUBLIO According to the study plan D20-823-1

(Part 2)

# Assessment of the efficacy of a product on the improvement of a psoriatic skin on human skin explants *ex vivo*

Tested products	<ul> <li>City water (Longjumeau)</li> </ul>	
	<ul> <li>City water (Longjumeau) hyperionised with the Sublio Ionic WaterBox Pro system</li> </ul>	

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# STUDY

This study was subject to a complete and detailed report under the reference 20E5078, returned to SUBLIO France, only owner of these results.

Date of the beginning of the study	2 <sup>nd</sup> April 2021
Date of the end of the technical phase of the study	24 <sup>th</sup> May 2021

## **TESTED PRODUCTS**

- P1 Water (Longjumeau city), sterilised by filtration at 0,22µm.
- P2 Water (Longjumeau city), sterilised by filtration at 0,22µm and hyperionised thanks to the **Sublio Ionic WaterBox** *Pro* device supplied by the SUBLIO France company.



This additional study was conducted to highlight an early parameter of the inflammatory phase characteristic of a psoriatic state: increased production of Tumor Necrosis Factor alpha (TNF-α).

TNF- $\alpha$  is a natural mediator of immunity and a potent inducer of the inflammatory response. It was assayed in the culture medium of the explants.



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### RESULTS

**1. TNF-** $\alpha$  **cytokine** => reflects inflammation

The induction of the psoriatic state leads to a significant increase of TNF- $\alpha$  cytokine production by 24%.



- The treatment **P1** (Longjumeau water) non-significantly reduces TNF- $\alpha$  linked to the inflammation.
- The treatment P2 (hyperionised Longjumeau water) significantly reduces TNF-α linked to inflammation state by 13%.

### CONCLUSION

These results show that a daily treatment of 4 days with only 2 microliters of water hyperionised with Sublio Ionic WaterBox *Pro* device per cm<sup>2</sup>, allows to reduce a main marker of inflammatory state of the psoriatic skin.

This completes previous good results (part 1) obtained on three main markers of the psoriatic skin.



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