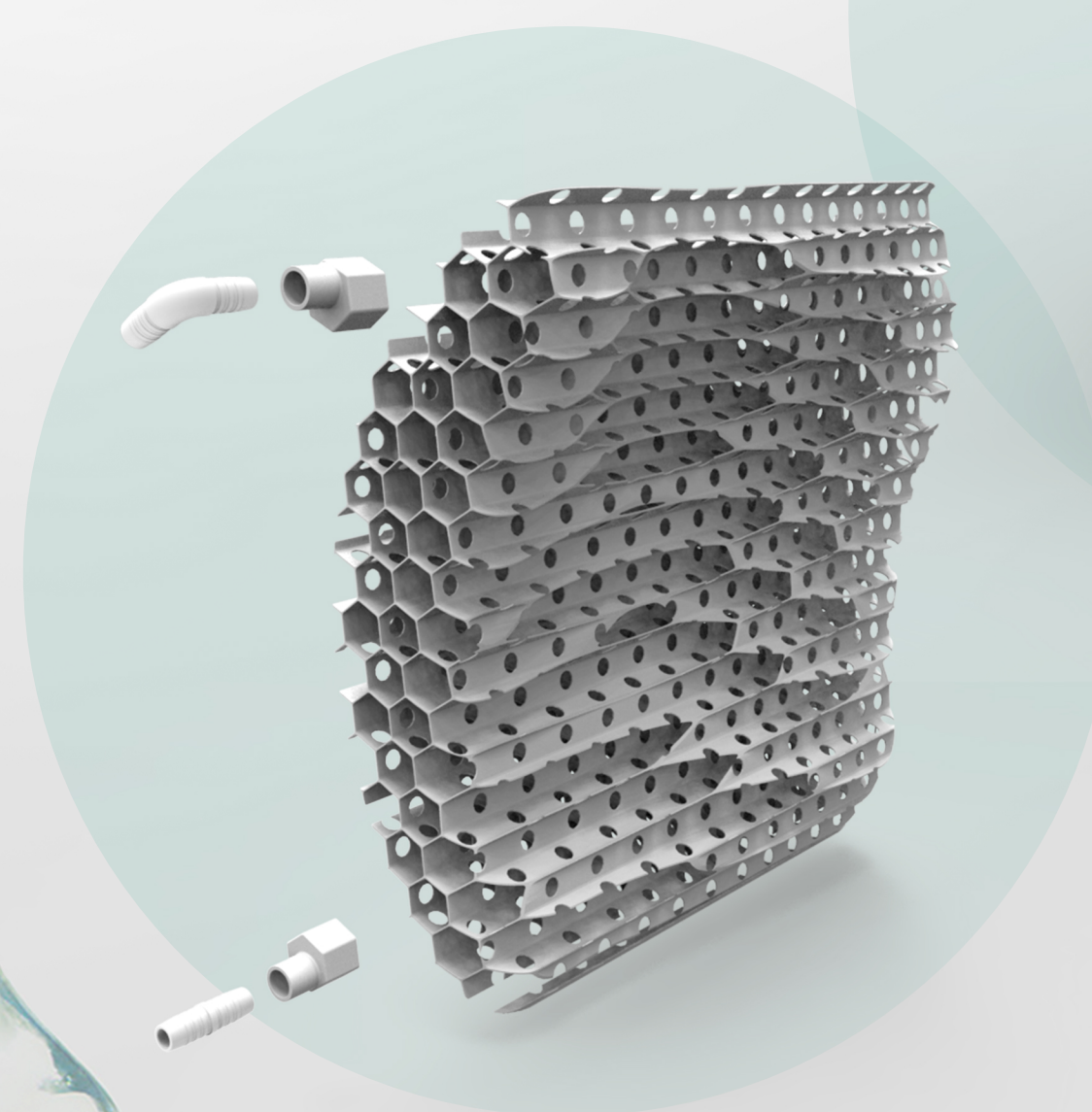
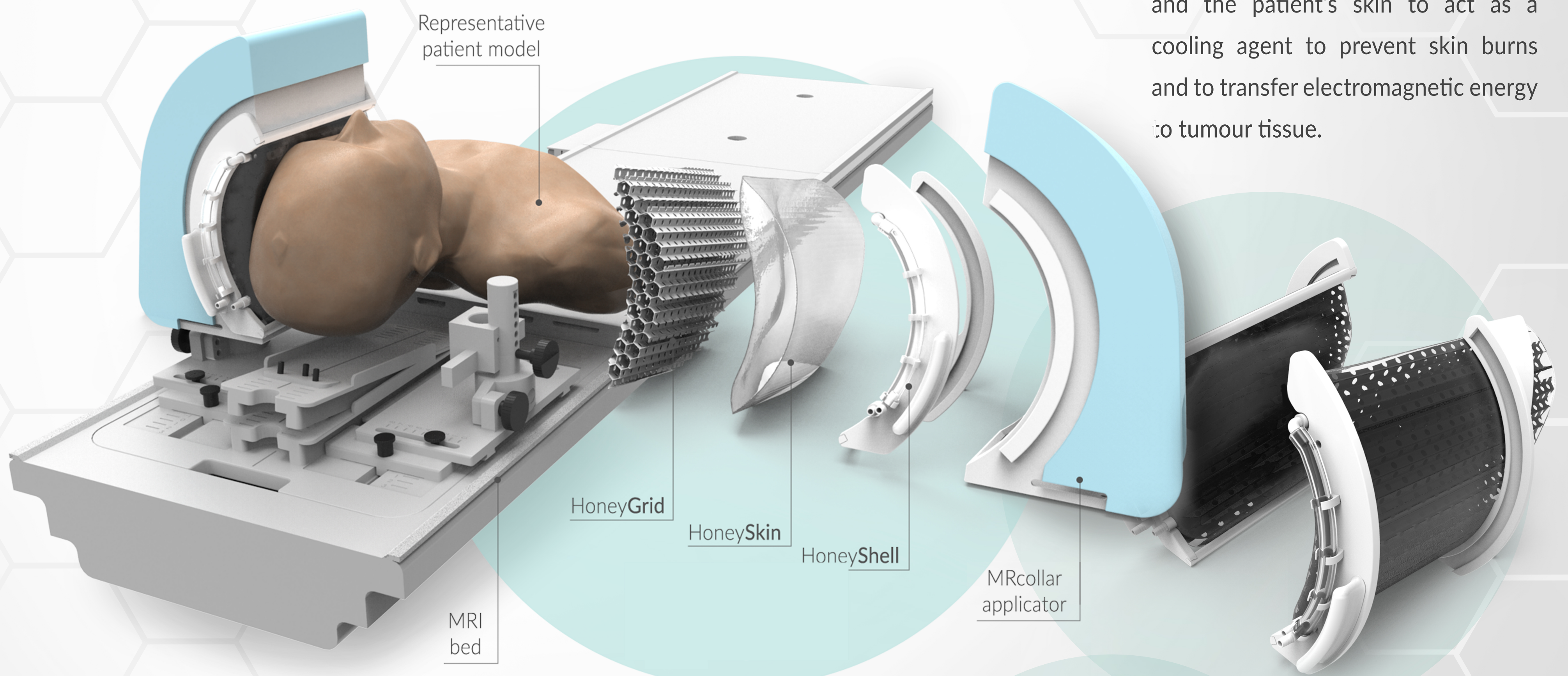


# HoneyPad

## ergonomic water bolus design for head & neck hyperthermia treatment

Hyperthermia is a clinical method which selectively affects tumour cells by heating them to 40-44 °C. A water bolus is placed between the applicator and the patient's skin to act as a cooling agent to prevent skin burns and to transfer electromagnetic energy to tumour tissue.



The HoneyPad increases patient comfort in hyperthermia treatments by closely following the contours of the head and neck. An ergonomic fit has been developed through a 4D-anthropometric analysis of head and neck cancer patients.

Two interchangeable modules enable ergonomic treatment of both the head and neck. A 3D-printed honeycomb grid provides shape stability, while the side that is in contact with the patient's skin stays flexible. A pattern of cavities in the grid guides circulating water through the entire volume to uniformly cool the skin. The HoneyPad can easily be connected to the hyperthermia equipment by means of a sliding mechanism.

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Integrated Product Design (IPD)

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