



During a suborbital flight, pilots and passengers are subject to a particular environment and constraints that may be different depending individuals. There is the risk of a clinical event that requires management until landing where definitive healthcare can be provided. Understanding and mitigating these risks requires definition of medical monitoring systems and life support approaches, appropriate and proportionate to the risks, and compatible with the operational constraints of the flight architecture. You will first choose the type of vehicle you will work on, then:

- For vehicle number 1 (for local suborbital flights), define a single 'medical hub' system for the integrated capture, monitoring and transmission of medical and physiological data to facilitate in-flight medical monitoring.

**or**

- For vehicle number 2 (for high-speed long-range suborbital flights), define a single 'medical hub' system for the integrated capture, monitoring and transmission of medical and physiological data to facilitate in-flight evaluation of the medical implications of a 'test' transportation hypersonic flight.

*For this Work Package, we encourage teams from medical, bioscience, and engineering schools or even inter-disciplinary teams to participate. Please pay attention to the specific proposed flight architectures and consider the implications they have on the potential medical risks, and thus technical requirements, in addition to the likely operational constraints.*



General characteristics of reference vehicles:

■ Upload [PDF](#)

■ [Next WP](#)

■

[Application form](#)