SYSTEMS AND METHODS FOR ACTIVITY TRACKING AND PHYSIOLOGICAL SENSING FOR CARDIAC RECOVERY ASSESSMENT AND SUPPORT IN MECHANICAL BLOOD PUMPS

ABSTRACT

Disclosed is a system and method for supporting and monitoring mechanical blood pumps in use with a subject. The system includes (i) a mechanical blood pump; (ii) sensors configured to detect a movement and a physiological condition of the subject; and (iii) one or more processors. The one or more processors may be configured to enable the adjustment of the support provided by the blood pump, such as via the following steps: (i) receiving input from the one or more sensors; (ii) determining an activity type, an activity intensity, or both an activity type and intensity based on the input; (iii) determining a value representative of cardiac recovery based on the input and the determined activity type, intensity, or both type and intensity; and (iv) generating a response based on the determinations and/or the received input.

[Fig. 1]