

Ontology of tachycardia

As related to Cytokine Release Syndrome (CRS)

Tachycardia is a common feature of CRS that provides clinically relevant information for patient care.

DE-RISKING CYTOKINE RELEASE SYNDROME



Digital Measures Development



Digital Health Measurement Collaborative Community



Ontology of tachycardia

Tachycardia

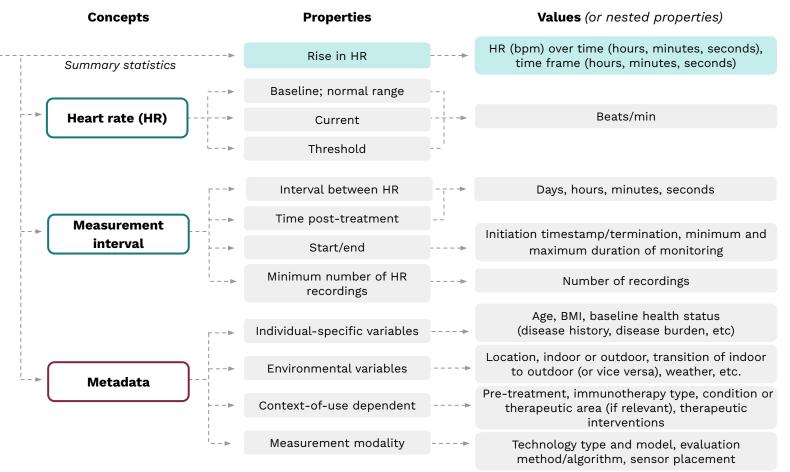
Also known as rapid or increased heart rate

Definition

A rise in heart rate above the personal normal baseline and above an acceptable threshold independent of activity

Measure

Change in heart rate from baseline heart rate until reaching the threshold heart rate



Examples

Heart rate (HR)

Baseline; normal range

Baseline: HR at pre-infusion time; HR over last 2 days.

Definition: HR over a specified time frame used as a comparator for future HR recordings.

Defining the parameters of baseline HR is critical for establishing safety parameters specific to the patient.

Heart rate (HR)

Threshold

Threshold: >100 bpm not attributed to physical activity; rapid, prolonged increase from baseline.

Definition: The point at which the measurement signals reach a critical transition.

Measurement interval

Interval between measures: Every four hours (standard of care); continuous monitoring.

Duration: 14 days (recommended observation period for CRS).

Measure considerations and assumptions:

- Baseline HR can vary from individual to individual.
 Establishing safe and meaningful thresholds will benefit from a personalized approach.
- Context is key; <u>HR can be</u> <u>influenced</u> by emotions, physical activity, medications, environmental conditions, body position, and body size.
- Sensor placement (e.g., wear location) and confounding disease states (e.g., atrial fibrillation) can influence the measurement of HR.

More more CRS resources are available to support you.

Full ontology of early warning signs of CRS



Ontology of fever generation



Ontology of tachycardia



Ontology of hypotension



Ontology of hypoxia

Visit the project page

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