**Title/nature of data: Physical Activity Monitor (Actical) Data**

**Study description** (an original summary that is specific to this dataset, along with inclusion/exclusion criteria):

Framingham Offspring Study (exam 9) and Omni cohort (exam 4) participants (n=2731) were asked to wear the Actical physical activity monitoring device at their routine clinic exam (2009-2014) on their right hip during waking hours for 8 days (to achieve a full 7 wear days) and to take it off only when showering. Almost 76% (n=1966) of participants agreed to wear the monitor, of which 94% (n=1845) returned the monitors with data that passed quality control.

Actical data are recorded in 30-s epochs and expressed as counts per 30 seconds. Continuous zeros ≥60 minutes (allowing 2 minutes of interruption) were deemed biologically implausible and were therefore coded as non-wear and excluded from further analysis. Each minute of wear time is classified using established cutpoints into sedentary (0-99 counts per epoch), light activity (100-742 counts per epoch), moderate activity (743-2778 counts per epoch) and vigorous activity (>2779 counts per epoch). Calculated variables for sedentary time are recommended to remove possible sleep time.

**Relevant Publications:** (please add lines as necessary)

|  |  |
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| **Reference (include Title, Author, etc)** | **Pubmed ID (if available)** |
| Glazer NL, Lyass A, Esliger DW, Blease SJ, Freedson PS, Massaro JM, Murabito JM, Vasan RS. Sustained and shorter bouts of physical activity are related to cardiovascular health. *Med Sci Sports Exerc*. 2013;45:109-115 | 22895372 |
| Crouter SE, Bassett DR, Jr. A new 2-regression model for the actical accelerometer. *Br J Sports Med*. 2008;42:217-224 | 17761786 |
| Heil DP. Predicting activity energy expenditure using the actical activity monitor. *Res Q Exerc Sport*. 2006;77:64-80 | 16646354 |

**Study attribution:** (please add lines as necessary)

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| **Header** | **Name** | **Affiliation** |
| Principal Investigator | Vasan Ramachandran, MD | Boston University |
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\*A necessary field