Supplementary Material

1 Supplementary Data

The datasets for this study can be found at the https://www.physionet.org/content/fantasia/1.0.0/ and https://www.physionet.org/content/challenge-2015/1.0.0/.

Supplementary Table 1. The datas of healthy subjects

| Name   | Gender | Age | Name   | Gender | Age |
|--------|--------|-----|--------|--------|-----|
| f2o01m | female | 73  | f2o01m | female | 23  |
| f2o02m | female | 75  | f2o02m | male   | 23  |
| f2o03m | female | 85  | f2o03m | female | 28  |
| f2o04m | female | 70  | f2o04m | female | 27  |
| f2o05m | male   | 83  | f2o05m | female | 25  |
| f2o06m | male   | 70  | f2o06m | male   | 26  |
| f2o07m | male   | 77  | f2o07m | male   | 31  |
| f2o08m | male   | 71  | f2o08m | male   | 21  |
| f2o09m | male   | 77  | f2o09m | female | 21  |
| f2o10m | female | 73  | f2o10m | male   | 21  |

Supplementary Table 2. The datas of life-threatening arrhythmias subjects

| EB | ET | VT | VF |
|----|----|----|----|
| b268s | b515l | t110s | t173l | v131l | v133l | v648s | f544s |
| b4551 | b516s | t174s | t208s | v197l | v221l | v724s | f563l |
| b456s | b517l | t175l | t209l | v253l | v254s | v729l | f450s |
| b494s | b560s | t213l | t214s | v255l | v290s | v765l | f543l |
| b495l | b561l | t279l | t251l | v309l | v318s | v788s | f545l |
| b562s | b578s | t252s | t276s | v328s | v329l | v797l | f697l |
| b659l | b664s | t277l | t284s | v334s | v522s | v701l |   |
| b708s | b722s | t305l | t333l | v523l | v541l | v726s |   |
| b757l | t335l | t406s | v542s | v559l | v578s | v758s |   |
| t412s | t413l | v564s | v571l | v772s |   |   |   |
| t417l | t418s | v573l | v579l | v793l |   |   |   |
| t424s | t425l | v596s | v607l | v803l |   |   |   |
| t594s | t677l | v625l | v626s | v788s |   |   |   |
| t690s | t702s | v629l | v646s | v797l |   |   |   |
| t707l | t719l | v793l | v842s | v813l |   |   |   |
| t731l | t739l | v803l | v836s | v831l |   |   |   |
| t760s | t777l | v815l | v844s | v837l |   |   |   |
| t816s |   |   |   |   |   |   |   |