

Table 2: ECG and EP Study data

| Time                                 | Group           | ECG      |                  |             |              | EP Study                 |                   |          |                     |                |
|--------------------------------------|-----------------|----------|------------------|-------------|--------------|--------------------------|-------------------|----------|---------------------|----------------|
|                                      |                 | RR (ms)  | QTc 12 lead (ms) | QTc V1 (ms) | QT disp (ms) | inducible VT (# animals) | VT induction      | VT CL    | VT morphology       | VT termination |
| Infarct Study: n = 7                 |                 |          |                  |             |              |                          |                   |          |                     |                |
| pre-MI                               |                 | 535 ± 49 | 413 ± 9          | 399 ± 10    | 25 ± 1       | 0/7                      | --                | --       | --                  | --             |
| 1 week post-MI                       |                 | 548 ± 34 | 417 ± 9          | 412 ± 11    | 33 ± 4       | 0/7                      | --                | --       | --                  | --             |
| 2 weeks post-MI                      |                 | 585 ± 32 | 439 ± 13         | 415 ± 12    | 32 ± 3       | 4/7                      | 4/4 triple ES     | 166 ± 8  | LBS1, RBS3          | DC4            |
| 3 weeks post-MI                      |                 | 546 ± 44 | 431 ± 13         | 411 ± 15    | 30 ± 3       | 7/7                      | 7/7 triple ES     | 171 ± 5  | LBS1, RBS6          | DC7            |
| 4 weeks post-MI                      |                 | 537 ± 21 | 427 ± 12         | 412 ± 10    | 30 ± 1       | 7/7                      | 7/7 triple ES     | 182 ± 11 | LBS1, RBS6          | VB1, DC6       |
| p value                              |                 | NS       | NS               | NS          | NS           | <0.01                    | NS                | NS       | NS                  | NS             |
| Gene Transfer Study: n = 5 per group |                 |          |                  |             |              |                          |                   |          |                     |                |
| pre-MI                               | no virus        | 558 ± 56 | 411 ± 15         | 382 ± 6     | 25 ± 2       | 0/5                      | --                | --       | --                  | --             |
|                                      | <i>lacZ</i>     | 518 ± 32 | 411 ± 15         | 396 ± 11    | 25 ± 3       | 0/5                      | --                | --       | --                  | --             |
|                                      | G628S           | 569 ± 45 | 400 ± 9          | 384 ± 10    | 27 ± 1       | 0/5                      | --                | --       | --                  | --             |
| p value                              |                 | NS       | NS               | NS          | NS           | NS                       | NS                | NS       | NS                  | NS             |
| pre-GTx (post-MI week 3)             | no virus        | 545 ± 34 | 426 ± 6          | 401 ± 9     | 27 ± 1       | 5/5                      | 5/5 triple ES     | 176 ± 12 | LBS 1, RBS4         | VB1, DC4       |
|                                      | <i>lacZ</i>     | 551 ± 69 | 432 ± 13         | 409 ± 17    | 28 ± 1       | 5/5                      | 5/5 triple ES     | 170 ± 10 | LBS 1, RBS4         | DC5            |
|                                      | G628S           | 534 ± 43 | 429 ± 13         | 405 ± 15    | 29 ± 1       | 5/5                      | 5/5 triple ES     | 176 ± 11 | LBS2, RBS3          | VB2, DC3       |
| p value                              |                 | NS       | NS               | NS          | NS           | NS                       | NS                | NS       | NS                  | NS             |
| post-GTx (post-MI week 4)            | no virus        | 584 ± 45 | 432 ± 16         | 404 ± 11    | 28 ± 1       | 5/5                      | 5/5 triple ES     | 183 ± 11 | LBS1, RBS4          | VB1, DC4       |
|                                      | <i>lacZ</i>     | 568 ± 45 | 431 ± 20         | 407 ± 15    | 28 ± 3       | 5/5                      | 5/5 triple ES     | 186 ± 13 | LBS1, RBS3, LBI1    | VB1, DC4       |
|                                      | G628S           | 561 ± 46 | 438 ± 8          | 419 ± 7     | 34 ± 5       | 0/5                      | --                | --       | --                  | --             |
| p value                              |                 | NS       | NS               | NS          | NS           | <0.01                    | NS                | NS       | NS                  | NS             |
| dofetilide (10 µg/kg IV)             | before infusion | 685 ± 16 | 410 ± 5          | 415 ± 9     | 25 ± 3       | 3/3                      | 3/3 triple ES     | 192 ± 22 | 2 RBS, 1 RBI        | VB 2, DC1      |
|                                      | after infusion  | 789 ± 37 | 484 ± 7          | 469 ± 3     | 41 ± 2       | 3/3                      | 2 triple ES, 1 VB | 260 ± 31 | 1 RBS, 1 LBS, 1 RBI | VB 2, DC1      |
| p value                              |                 | <0.05    | < 0.01           | <0.01       | <0.01        | NS                       | NS                | 0.01     | NS                  | NS             |

abbreviations: G628S: KCNH2-G628S, RR: sinus rhythm cycle length, VT CL: VT cycle length, triple ES: 3 extrastimuli during programmed stimulation, VB: ventricular burst pacing, LBS: left bundle superior axis, RBS: right bundle superior axis, LBI: left bundle inferior axis, RBI: right bundle inferior axis, DC: direct current cardioversion; p value determined by ANOVA, t-test or  $\chi^2$  as appropriate