## ON-LINE APPENDIX Table 1. Risk of death(all-cause) in Intensive vs Standard Glycemia within Demographic Categories

|                        | Intensive Glycemia | Standard Glycemia | Hazard Ratio | Lower 95% CI | Upper 95% CI | P-value with subgroup | P-value interaction |
|------------------------|--------------------|-------------------|--------------|--------------|--------------|-----------------------|-------------------|
| **N**                  | 5128               | 5123              | 1.217        | 1.012        | 1.463        | 0.0368                |                   |
| **Deaths**             | 257                | 203               | 3.96%        | 3.68%        | 3.97%        |                       |                   |
| **% Deaths**           | 5.01%              | 4.03%             |              |              |              |                       |                   |
| **AGE**                |                    |                   |              |              |              |                       |                   |
| Age < 65               | 3397               | 3382              | 1.217        | 1.012        | 1.463        | 0.0368                |                   |
| Age 65-69              | 938                | 947               | 1.233        | 0.835        | 1.821        | 0.2914                |                   |
| Age 70-74              | 516                | 537               | 1.014        | 0.649        | 1.586        | 0.9506                |                   |
| Age 75+                | 277                | 257               | 0.901        | 0.554        | 1.466        | 0.6753                | 0.4049            |
| **SEX**                |                    |                   |              |              |              |                       |                   |
| Women                  | 1983               | 1969              | 1.233        | 0.873        | 1.741        | 0.2340                |                   |
| Male                   | 3145               | 3154              | 1.210        | 0.973        | 1.504        | 0.0870                |                   |
| **HOME STATUS**        |                    |                   |              |              |              |                       |                   |
| Live Alone             | 1031               | 1047              | 1.254        | 1.016        | 1.548        | 0.0350                | 0.5679            |
| Live With Others       | 4096               | 4075              | 1.254        | 1.016        | 1.548        | 0.0350                | 0.5679            |
| **RACE**               |                    |                   |              |              |              |                       |                   |
| Caucasian              | 3194               | 3199              | 1.217        | 0.975        | 1.518        | 0.0819                |                   |
| Hispanic               | 358                | 380               | 0.602        | 0.272        | 1.328        | 0.2065                |                   |
| Afr-American           | 996                | 956               | 1.597        | 1.013        | 2.518        | 0.0440                |                   |
| Asian/Other            | 580                | 588               | 1.055        | 0.537        | 2.073        | 0.8755                | 0.2139            |
| **CLINICAL CENTER NETWORK** |              |                   |              |              |              |                       |                   |
| Canadian               | 752                | 755               | 1.330        | 0.818        | 2.164        | 0.2502                |                   |
| Western                | 863                | 877               | 1.088        | 0.673        | 1.758        | 0.7307                |                   |
| Minn/Iowa              | 623                | 619               | 1.162        | 0.658        | 2.051        | 0.6049                |                   |
| Ohio/MI                | 785                | 784               | 1.185        | 0.712        | 1.973        | 0.5134                |                   |
| Northeast              | 608                | 610               | 1.266        | 0.745        | 2.150        | 0.3834                |                   |
| Southeast              | 775                | 775               | 1.446        | 0.856        | 2.443        | 0.1678                |                   |
| VA Network             | 722                | 703               | 1.101        | 0.747        | 1.623        | 0.6271                | 0.9828            |
| **BODY MASS INDEX**    |                    |                   |              |              |              |                       |                   |
| BMI < 30               | 1918               | 1901              | 1.095        | 0.811        | 1.477        | 0.5540                |                   |
| BMI 30-34              | 1675               | 1690              | 1.046        | 0.758        | 1.443        | 0.7841                |                   |
| BMI 35+                | 1532               | 1529              | 1.700        | 1.197        | 2.413        | 0.0030                | 0.0778            |
| **WAIST CIRCUMFERENCE (CM)** |        |                   |              |              |              |                       |                   |
| Waist Circ < 96.69     | 1275               | 1271              | 1.073        | 0.723        | 1.593        | 0.7270                |                   |
| Waist Circ 96.69-106.60| 1225               | 1253              | 0.872        | 0.586        | 1.297        | 0.4977                |                   |
| Waist Circ 106.60-116  | 1277               | 1286              | 1.214        | 0.840        | 1.756        | 0.3019                |                   |
| Waist Circ >116        | 1297               | 1267              | 1.661        | 1.171        | 2.357        | 0.0045                | 0.1003            |
| **EDUCATION**          |                    |                   |              |              |              |                       |                   |

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ON-LINE APPENDIX Table 1. Risk of death (all-cause) in Intensive vs Standard Glycemia within Demographic Categories

|                      | Intensive Glycemia | Standard Glycemia | Hazard Ratio | Lower 95% CI | Upper 95% CI | P-value w/in subgroup | P-value interaction |
|----------------------|--------------------|-------------------|--------------|--------------|--------------|------------------------|---------------------|
|                      | N                  | # Deaths | % Deaths | N           | # Deaths | % Deaths |                      |                      |
| Educ: < HS           | 804                | 47       | 5.85%    | 717         | 43       | 6%       | 0.912                  | 0.602               | 1.379               | 0.6612               |
|                      | Edu: HS grad       | 1338     | 75       | 5.61%       | 1366     | 61       | 4.47%                  | 0.988               | 0.689               | 1.418                | 0.9485               |
|                      | Edu: some college/tech | 1673 | 81       | 4.84%       | 1684     | 56       | 3.33%                  | 1.192               | 0.797               | 1.784                | 0.3924               |
|                      | Edu: college grad or more | 1309 | 53       | 4.05%       | 1353     | 43       | 3.18%                  | 1.192               | 0.797               | 1.784                | 0.3924               |
| YEAR RANDOMIZED INTO THE STUDY |                |                      |              |                      |                      |                      |                      |                      |                      |
| Rand 2001            | 597                | 62       | 10.39%   | 577         | 57       | 9.88%    | 0.988                  | 0.689               | 1.418                | 0.9485               |
| Rand 2003            | 1573               | 96       | 6.1%     | 1591        | 76       | 4.78%    | 1.252                  | 0.926               | 1.692                | 0.1440               |
| Rand 2004            | 1601               | 69       | 4.31%    | 1591        | 39       | 2.45%    | 1.715                  | 1.158               | 2.539                | 0.0071               |
| Rand 2005            | 1357               | 30       | 2.21%    | 1364        | 31       | 2.27%    | 0.909                  | 0.549               | 1.507                | 0.7128               | 0.1698               |

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## ON-LINE APPENDIX Table 2. Risk of death (all-cause) in Intensive vs Standard Glycemia w/in Medical History

|                          | Intensive Glycemia | Standard Glycemia | Hazard Ratio | Lower 95% CI | Upper 95% CI | P-value w/in subgroup | P-value interaction |
|--------------------------|--------------------|-------------------|--------------|-------------|-------------|-----------------------|---------------------|
| **Overall**              | N = 5128      | Deaths = 257 | % Deaths = 5.01% | N = 5123 | Deaths = 203 | % Deaths = 3.96% | 1.217 | 1.012 | 1.463 | 0.0368 |
| **PRIOR CARDIOVASCULAR DISEASE** |                  |                  |              |             |             |                       |                     |
| Prior CVD: Yes           | 1825         | 139 | 7.62% | 1783  | 101 | 5.66% | 1.286 | 0.995 | 1.663 | 0.0542 |
| Prior CVD: No            | 3303         | 118 | 3.57% | 3340  | 102 | 3.05% | 1.145 | 0.878 | 1.492 | 0.3183 |
| **PRIOR HEART FAILURE/CHF** |                |                  |              |             |             |                       |                     |
| Prior Heart Failure/CHF  | 249          | 35  | 14.06% | 245  | 25  | 10.2% | 1.040 | 0.619 | 1.748 | 0.8824 |
| No Prior Heart Failure/CHF | 4836  | 219 | 4.53% | 4835  | 169 | 3.5%  | 1.261 | 1.032 | 1.541 | 0.0236 |
| **DIABETES DURATION (years)** |                |                  |              |             |             |                       |                     |
| Diab Dur 0-5             | 1474         | 64  | 4.34% | 1455  | 62  | 4.26% | 0.969 | 0.683 | 1.375 | 0.8601 |
| Diab Dur 6-10            | 1472         | 68  | 4.62% | 1459  | 46  | 3.15% | 1.392 | 0.957 | 2.024 | 0.0837 |
| Diab Dur 11-15           | 971          | 42  | 4.33% | 987   | 33  | 3.34% | 1.216 | 0.770 | 1.920 | 0.4023 |
| Diab Dur 16+             | 1163         | 80  | 6.88% | 1178  | 61  | 5.18% | 1.352 | 0.968 | 1.888 | 0.0765 |
| **SELF-REPORTED HISTORY OF NEUROPATHY/NERVE PROBLEMS** |                |                  |              |             |             |                       |                     |
| Hist of Neuropathy:Yes   | 1327         | 104 | 7.84% | 1410  | 58  | 4.11% | 1.950 | 1.414 | 2.690 | <.0001 |
| Hist of Neuropathy:No    | 3708         | 152 | 4.1%  | 3646  | 140 | 3.84% | 0.999 | 0.794 | 1.258 | 0.9957 |
| **PERIPHERAL NEUROPATHY ON FOOT EXAM** |                |                  |              |             |             |                       |                     |
| PeriNeuro on Exam:Yes    | 2168         | 144 | 6.64% | 2189  | 117 | 5.34% | 1.195 | 0.936 | 1.526 | 0.1524 |
| PeriNeuro on Exam:No     | 2955         | 113 | 3.82% | 2923  | 86  | 2.94% | 1.246 | 0.941 | 1.649 | 0.1253 |
| **RETINAL SURGERY**      |               |                  |              |             |             |                       |                     |
| Retinal Surgery:Yes      | 563          | 40  | 7.1%  | 608   | 43  | 7.07% | 0.995 | 0.647 | 1.531 | 0.9824 |
| Retinal Surgery:No       | 4511         | 212 | 4.7%  | 4460  | 158 | 3.54% | 1.266 | 1.030 | 1.556 | 0.0251 |
| **VISUAL ACUITY SCORE**  |               |                  |              |             |             |                       |                     |
| VisAcuity: <20/40        | 1163         | 83  | 7.14% | 1174  | 69  | 5.68% | 1.188 | 0.863 | 1.636 | 0.2902 |
| VisAcuity: 20/20-20/40   | 2958         | 138 | 4.67% | 2990  | 112 | 3.75% | 1.196 | 0.932 | 1.535 | 0.1600 |
| VisAcuity: >=20/20       | 759          | 18  | 2.37% | 751   | 11  | 1.46% | 1.581 | 0.745 | 3.359 | 0.2330 |
| **SMOKING STATUS**       |               |                  |              |             |             |                       |                     |
| Never Smoker             | 2116         | 71  | 3.36% | 2166  | 60  | 2.77% | 1.170 | 0.829 | 1.651 | 0.3711 |
| Former Smoker            | 2276         | 141 | 6.2%  | 2251  | 100 | 4.44% | 1.361 | 1.053 | 1.759 | 0.0186 |
| Current Smoker           | 730          | 43  | 5.89% | 699   | 43  | 6.15% | 0.883 | 0.578 | 1.350 | 0.5660 |
| **HISTORY OF DEPRESSION** |               |                  |              |             |             |                       |                     |
| HistDepr:Yes             | 1196         | 57  | 4.77% | 1225  | 54  | 4.41% | 1.040 | 0.716 | 1.512 | 0.8357 |
| HistDepr:No              | 3897         | 196 | 5.03% | 3868  | 145 | 3.75% | 1.290 | 1.041 | 1.600 | 0.0200 |

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|                      | Intensive Glycemia | Standard Glycemia | Hazard Ratio | Lower 95% CI | Upper 95% CI | P-value w/in subgroup | P-value interaction |
|----------------------|--------------------|-------------------|--------------|--------------|--------------|-----------------------|---------------------|
| **SYSTOLIC BLOOD PRESSURE** |                    |                   |              |              |              |                       |                     |
| SBP < 135            | 2435               | 2435              | 1.306        | 0.994        | 1.717        | 0.0556                |                     |
| SBP 135+             | 2668               | 2668              | 1.139        | 0.886        | 1.463        | 0.3103                | 0.204               |
| **BASELINE ECG DETECTION OF PRIOR MI** |                    |                   |              |              |              |                       |                     |
| No prev MI on ECG    | 4396               | 4392              | 1.235        | 1.012        | 1.508        | 0.0380                |                     |
| Prev MI on ECG       | 226                | 250               | 0.682        | 0.324        | 1.434        | 0.3125                | 0.1251              |
| **ANY MAJOR ABNORMALITY ON BASELINE ECG** |                    |                   |              |              |              |                       |                     |
| No abnormality on ECG| 3443               | 3455              | 1.180        | 0.919        | 1.514        | 0.1937                |                     |
| Major abnormality on ECG | 1161              | 1166             | 1.176        | 0.866        | 1.595        | 0.2988                | 0.9921              |
| **ANY PRIOR AMPUTATION** |                    |                   |              |              |              |                       |                     |
| Prior Amputation     | 91                 | 94                | 1.249        | 0.519        | 3.009        | 0.6200                |                     |
| No Amputation        | 5037               | 5029              | 1.222        | 1.012        | 1.476        | 0.0370                | 0.9253              |
### Table 3. Risk of death (all-cause) in Intensive vs Standard Glycemia w/in Baseline Treatment

|                         | Intensive Glycemia | Standard Glycemia | Hazard Ratio | Lower 95% CI | Upper 95% CI | P-value w/in subgroup | P-value interaction |
|-------------------------|--------------------|-------------------|--------------|-------------|-------------|----------------------|---------------------|
| **Overall**             |                    |                   | 1.226        | 1.020       | 1.474       | 0.0301               |                     |
| **SULFONYLUREAS**       |                    |                   |              |             |             |                      |                     |
| SU:Yes                  | 2607               | 122               | 4.68%        |             |             |                      |                     |
| SU:No                   | 2521               | 135               | 5.36%        |             |             |                      |                     |
| **METFORMIN**           |                    |                   |              |             |             |                      |                     |
| Metformin:Yes           | 3059               | 147               | 4.81%        |             |             |                      |                     |
| Metformin:No            | 2069               | 110               | 5.32%        |             |             |                      |                     |
| **THIAZOLIDINE DIONES** |                    |                   |              |             |             |                      |                     |
| TZD:Yes                 | 999                | 44                | 4.4%         |             |             |                      |                     |
| TZD:No                  | 4129               | 213               | 5.16%        |             |             |                      |                     |
| **ANY INSULIN**         |                    |                   |              |             |             |                      |                     |
| Any Insulin:Yes         | 1750               | 109               | 6.23%        |             |             |                      |                     |
| Any Insulin:No          | 3376               | 148               | 4.38%        |             |             |                      |                     |
| **ANY BLOOD PRESSURE MEDICATIONS** | | | | | | | |
| Any BP Meds: Yes        | 4225               | 217               | 5.14%        |             |             |                      |                     |
| Any BP Meds: No         | 903                | 40                | 4.43%        |             |             |                      |                     |
| **THIAZIDE DIURETICS**  |                    |                   |              |             |             |                      |                     |
| ThiazDiur:Yes           | 1357               | 66                | 4.86%        |             |             |                      |                     |
| ThiazDiur:No            | 3771               | 191               | 5.06%        |             |             |                      |                     |
| **ACE INHIBITORS**      |                    |                   |              |             |             |                      |                     |
| AcelInhib:Yes           | 2718               | 153               | 5.63%        |             |             |                      |                     |
| AcelInhib:No            | 2410               | 104               | 4.32%        |             |             |                      |                     |
| **BETA BLOCKERS**       |                    |                   |              |             |             |                      |                     |
| BB:Yes                  | 1470               | 82                | 5.58%        |             |             |                      |                     |
| BB:No                   | 3658               | 175               | 4.78%        |             |             |                      |                     |
| **DICCBS**              |                    |                   |              |             |             |                      |                     |
| DICCB:Yes               | 593                | 40                | 6.75%        |             |             |                      |                     |
| DICCB:No                | 4535               | 217               | 4.79%        |             |             |                      |                     |
| **ANY STATIN**          |                    |                   |              |             |             |                      |                     |
| Statins:Yes             | 3166               | 147               | 4.64%        |             |             |                      |                     |
| Statins:No              | 1962               | 110               | 5.61%        |             |             |                      |                     |
| **ANY LIPID LOWERING MEDICATION** | | | | | | | |
| Any LL Med:Yes          | 3433               | 161               | 4.69%        |             |             |                      |                     |
| Any LL Med:No           | 1695               | 96                | 5.66%        |             |             |                      |                     |
| **ASPIRIN**             |                    |                   |              |             |             |                      |                     |
### Table 3. Risk of death (all-cause) in Intensive vs Standard Glycemia w/in Baseline Treatment

|                               | Intensive Glycemia | Standard Glycemia | Hazard Ratio | Lower 95% CI | Upper 95% CI | P-value w/in subgroup | P-value interaction |
|-------------------------------|--------------------|------------------|--------------|--------------|--------------|------------------------|---------------------|
|                               | N                  | # Deaths | % Deaths | N             | # Deaths | % Deaths | # Deaths | % Deaths | # Deaths | % Deaths | # Deaths | % Deaths | Lower 95% CI | Upper 95% CI | P-value w/in subgroup | P-value interaction |
| Aspirin:Yes                  | 2808               | 161      | 5.73%    | 2771          | 106     | 3.83%    | 1.446      | 1.131   | 1.848   | 0.0032   |          |          |          |          |                      |                      |                      |                      |
| Aspirin:No                   | 2320               | 96       | 4.14%    | 2352          | 97      | 4.12%    | 0.955      | 0.720   | 1.267   | 0.7487   | 0.0309   |          |          |          |                      |                      |                      |                      |
| ANY ANTIDEPRESSANT T         |                    |          |          |               |          |          |            |          |          |          |                      |                      |                      |                      |
| AntiDep:Yes                  | 656                | 38       | 5.79%    | 693           | 21      | 3.03%    | 1.874      | 1.099   | 3.196   | 0.0210   |          |          |          |          |                      |                      |                      |                      |
| AntiDep:No                   | 4472               | 219      | 4.9%     | 4430          | 182     | 4.11%    | 1.145      | 0.941   | 1.394   | 0.1767   | 0.0848   |          |          |          |                      |                      |                      |                      |
ON-LINE APPENDIX Table 4. Risk of death(all-cause) in Intensive vs Standard Glycemia w/in Baseline Lab Values

|                          | Intensive Glycemia | Standard Glycemia | Hazard Ratio | Lower 95% CI | Upper 95% CI | P-value w/in subgroup | P-value interaction |
|--------------------------|--------------------|-------------------|--------------|--------------|--------------|-----------------------|---------------------|
| Overall                  | 5128 257 5.01%     | 5123 203 3.96%    | 1.226        | 1.020        | 1.474        | 0.0301                |                     |
| A1c                      |                    |                   |              |              |              |                       |                     |
| Hba1c < 7.5              | 1036 50 4.83%      | 1022 45 4.4%      | 1.000        | 0.667        | 1.497        | 0.9982                |                     |
| Hba1c 7.5 to 8.4         | 2226 93 4.18%      | 2200 90 4.09%     | 1.001        | 0.749        | 1.338        | 0.9936                |                     |
| Hba1c 8.5+               | 1857 114 6.14%     | 1887 68 3.6%      | 1.644        | 1.217        | 2.220        | 0.0012                | 0.0444              |
| LDL                      |                    |                   |              |              |              |                       |                     |
| LDL < 100                | 2447 121 4.94%     | 2498 101 4.04%    | 1.204        | 0.924        | 1.568        | 0.1695                |                     |
| LDL 100-119              | 1146 54 4.71%      | 1067 34 3.19%     | 1.445        | 0.940        | 2.221        | 0.0932                |                     |
| LDL 120+                 | 1508 82 5.44%      | 1525 65 4.26%     | 1.183        | 0.854        | 1.639        | 0.3132                | 0.793               |
| TRIGLICERIDES            |                    |                   |              |              |              |                       |                     |
| TRIG < 300               | 4435 225 5.07%     | 4448 176 3.96%    | 1.234        | 1.013        | 1.503        | 0.0370                |                     |
| TRIG 300+                | 666 32 4.8%        | 642 24 3.74%      | 1.267        | 0.746        | 2.151        | 0.3813                | 0.9746              |
| HDL                      |                    |                   |              |              |              |                       |                     |
| HDL < 34                 | 1182 81 6.85%      | 1164 58 4.98%     | 1.335        | 0.953        | 1.871        | 0.0934                |                     |
| HDL 34-39                | 1318 59 4.48%      | 1291 45 3.49%     | 1.207        | 0.819        | 1.781        | 0.3419                |                     |
| HDL 40-47                | 1307 67 5.13%      | 1322 51 3.86%     | 1.273        | 0.884        | 1.833        | 0.1950                |                     |
| HDL 48+                  | 1294 50 3.86%      | 1313 46 3.5%      | 1.098        | 0.735        | 1.639        | 0.6479                | 0.8964              |
| SERUM CREATININE         |                    |                   |              |              |              |                       |                     |
| SCreat 0.1-1             | 3928 171 4.35%     | 3928 134 3.41%    | 1.236        | 0.986        | 1.550        | 0.0664                |                     |
| Screat >1                | 1173 86 7.33%      | 1161 66 5.68%     | 1.231        | 0.893        | 1.698        | 0.2044                | 0.9847              |
| CALCULATED MDRD GFR     |                    |                   |              |              |              |                       |                     |
| GFR 15.3-75.3            | 1301 88 6.76%      | 1242 67 5.39%     | 1.178        | 0.856        | 1.620        | 0.3150                |                     |
| GFR 75.4-89.5            | 1256 51 4.06%      | 1288 53 4.11%     | 0.939        | 0.639        | 1.300        | 0.7479                |                     |
| GFR 89.6-105.1           | 1268 60 4.73%      | 1293 43 3.33%     | 1.393        | 0.941        | 2.063        | 0.0980                |                     |
| GFR 105.2+               | 1276 58 4.55%      | 1266 37 2.92%     | 1.533        | 1.015        | 2.318        | 0.0425                | 0.3014              |
| ALBUMIN TO CREATININE RATIO |                  |                   |              |              |              |                       |                     |
| AlbCreatRatio < 30       | 3504 130 3.71%     | 3494 114 3.26%    | 1.115        | 0.867        | 1.435        | 0.3950                |                     |
| AlbCreatRatio 30-300     | 1260 89 7.06%      | 1241 59 4.75%     | 1.399        | 1.006        | 1.946        | 0.0461                |                     |
| AlbCreatRatio > 30       | 330 36 10.91%      | 343 29 8.45%      | 1.156        | 0.706        | 1.891        | 0.5645                | 0.548               |