

**Table 1:** Socio-demographic variables by HbA1c status.

|                         |                          | <b>High HbA1c</b> | <b>Low HbA1c</b> | <b>p-value</b> |
|-------------------------|--------------------------|-------------------|------------------|----------------|
| <b>Variable</b>         |                          | Mean (SD)         |                  |                |
| <b>Age (years)</b>      |                          | 80.2 (7.4)        | 82.8 (8.1)       | <0.001         |
|                         | Category                 | n/249 (%)         | n/822 (%)        |                |
| <b>Gender</b>           | Female                   | 142 (57.0)        | 457 (55.6)       | 0.716          |
|                         | Male                     | 107 (43.0)        | 365 (44.4)       |                |
| <b>Ethnicity</b>        | European                 | 61 (24.5)         | 463 (56.4)       | <0.001         |
|                         | Māori                    | 35 (14.1)         | 76 (9.2)         |                |
|                         | Pacific Islander         | 115 (46.2)        | 207 (25.2)       |                |
|                         | Other                    | 38 (15.2)         | 76 (9.2)         |                |
| <b>Dementia subtype</b> | Alzheimer's disease (AD) | 62 (24.9)         | 330 (40.1)       | <0.001         |
|                         | Vascular dementia (VD)   | 133 (53.4)        | 299 (36.4)       |                |
|                         | Mixed dementia (AD/VD)   | 13 (5.2)          | 35 (4.3)         |                |
|                         | Other dementias          | 41 (16.5)         | 158 (19.2)       |                |

**Table 2:** Dementia group status by ethnic group.

| Ethnicity       | Patient category |                          |                               |                          |   |                          |                                       |                          |
|-----------------|------------------|--------------------------|-------------------------------|--------------------------|---|--------------------------|---------------------------------------|--------------------------|
|                 | All (n=1077)     |                          | Dementia and HbA1c≥50 (n=249) |                          | Dementia, HbA1c≥50, and normal CT scan (n=40) |                          | Meeting all four DRD criteria* (n=17) |                          |
|                 | n (%)            | HbA1c mmol/mol Mean (SD) | n (%)                         | HbA1c mmol/mol Mean (SD) | n (%)   | HbA1c mmol/mol Mean (SD) | n (%)                                 | HbA1c mmol/mol Mean (SD) |
| <b>European</b> | 527 (48.9)       | 42.1 (10.5)              | 61 (24.5)                     | 65.9 (14.1)              | 7 (17.5)                                      | 66 (22.3)                | 5 (29.4)                              | 59.4 (9.4)               |
| <b>Māori</b>    | 111 (10.3)       | 47.8 (14.0)              | 35 (14.1)                     | 63.5 (15.0)              | 9 (22.5)                                      | 59 (9.14)                | 7 (41.2)                              | 59.6 (10.1)              |
| <b>Pacific</b>  | 325 (30.2)       | 53.0 (21.4)              | 115 (46.2)                    | 75.4 (21.7)              | 19 (47.5)                                     | 76.1 (22.4)              | 4 (23.5)                              | 80.2 (27.6)              |
| <b>Other</b>    | 114 (10.6)       | 48.1 (13.7)              | 38 (15.3)                     | 63.6 (13.1)              | 5 (12.5)                                      | 58.2 (6.91)              | 1 (5.9)                               | 61.0 (-)                 |

\*DRD criteria defined as dementia, diabetes, “normal” CT scans, and less impaired memory subscore.

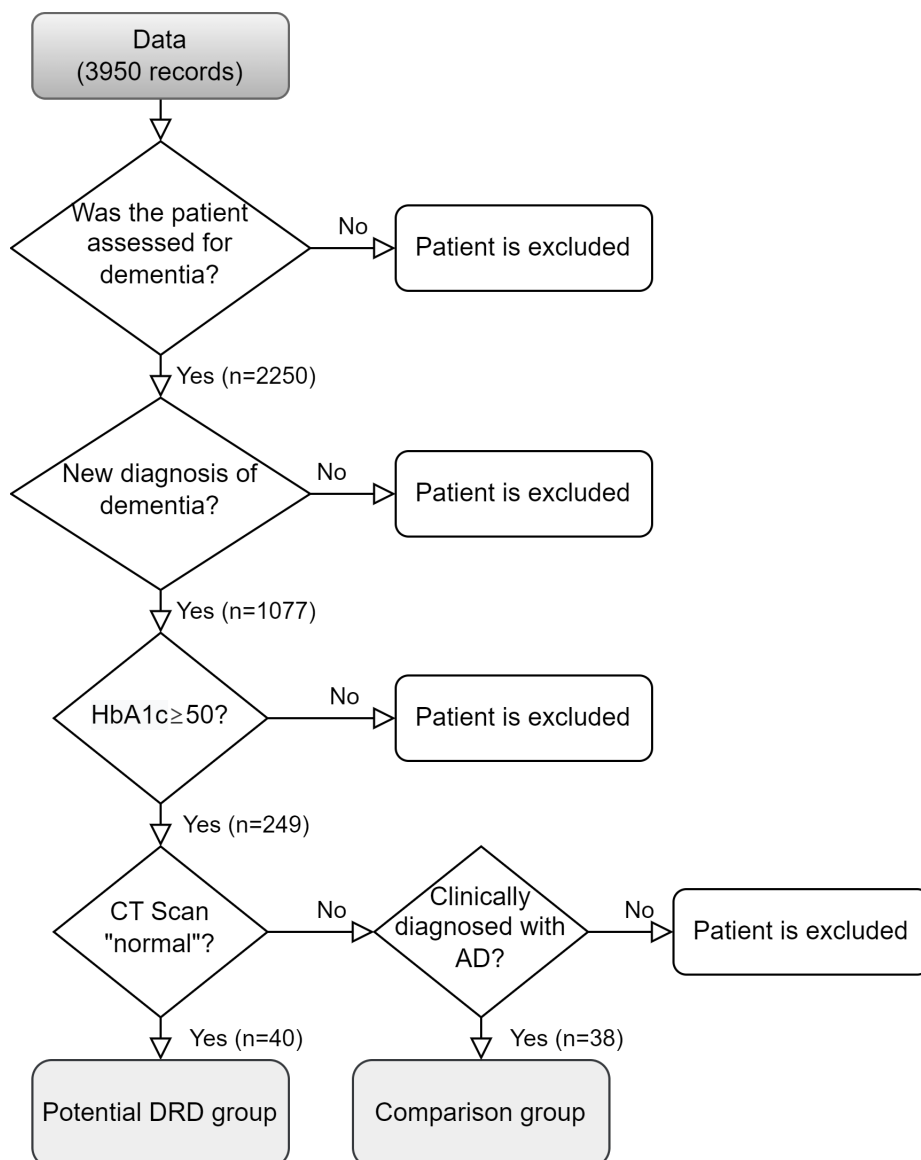
**Table 3:** Socio-demographic variables by DRD and AD for all ethnicities and for Pacific subgroup.

|  |              | All ethnicities (n=78) |                       |                | Pacific subgroup (n=31) |                      |                |
|--|--------------|------------------------|-----------------------|----------------|-------------------------|----------------------|----------------|
|  |              | DRD (n=40)             | AD (n=38)             | p-value        | DRD (n=19)              | AD (n=12)            | p-value        |
|  |              | Mean (SD)              |                       |                | Mean (SD)               |                      |                |
| Age (years)  |              | 77.7 (7.9)             | 83.6 (6.9)            | 0.001          | 77.4 (9.0)              | 80.2 (8.4)           | 0.215          |
| HbA1c level (mmol/mol)                                 |              | 68.2 (19.8)            | 64.2 (12.9)           | 0.290          | 76.1 (22.4)             | 66.2 (17.8)          | 0.128          |
|  |              | n/40 (%)               | n/38 (%)              |                | n/19 (%)                | n/12 (%)             |                |
| Gender   | Female       | 26 (65.0)              | 24 (63.2)             | 1.000          | 12 (63.2)               | 8 (66.7)             | 1.000          |
|  | Male         | 14 (35.0)              | 14 (36.8)             |                | 7 (36.8)                | 4 (33.3)             |                |
| Ethnicity  | European     | 7 (17.5)               | 15 (39.5)             | 0.174          |                         |                      |                |
|  | Māori        | 9 (22.5)               | 6 (15.8)              |                |                         |                      |                |
|  | Pacific      | 19 (47.7)              | 12 (31.6)             |                |                         |                      |                |
|  | Other        | 5 (12.5)               | 5 (13.1)              |                |                         |                      |                |
| Dementia severity*                                     | Mild         | 26 (84.6)              | 22 (60.61)            | 0.139          | 9 (64.3)                | 6 (54.5)             | 0.697          |
|  | Mod-Severe   | 8 (15.4)               | 15 (39.39)            |                | 5 (35.7)                | 5 (45.5)             |                |
| <b>Cognitive scores**</b>                              |              |                        |                       |                |                         |                      |                |
| <b>(Mean and median scores)</b>                        |              | <b>ACE-III (n=19)</b>  | <b>ACE-III (n=20)</b> | <b>p-value</b> | <b>ACE-III (n=5)</b>    | <b>ACE-III (n=3)</b> | <b>p-value</b> |
|  |              | <b>RUDAS (n=17)</b>    | <b>RUDAS (n=15)</b>   |                | <b>RUDAS (n=12)</b>     | <b>RUDAS (n=9)</b>   |                |
| Total cognitive score, ACE-III or RUDAS (standardised) | Mean (SD)    | 0.64 (0.12)            | 0.59 (0.14)           | 0.159          | 0.63 (0.09)             | 0.51 (0.14)          | 0.013          |
| Total ACE-III score (max 100)                          | Median (IQR) | 67 (59.5, 72.5)        | 65.5 (55.8, 69.5)     | 0.693          | 58 (55, 60)             | 55 (49.5, 65)        | 0.881          |

**Table 3 (continued):** Socio-demographic variables by DRD and AD for all ethnicities and for Pacific subgroup.

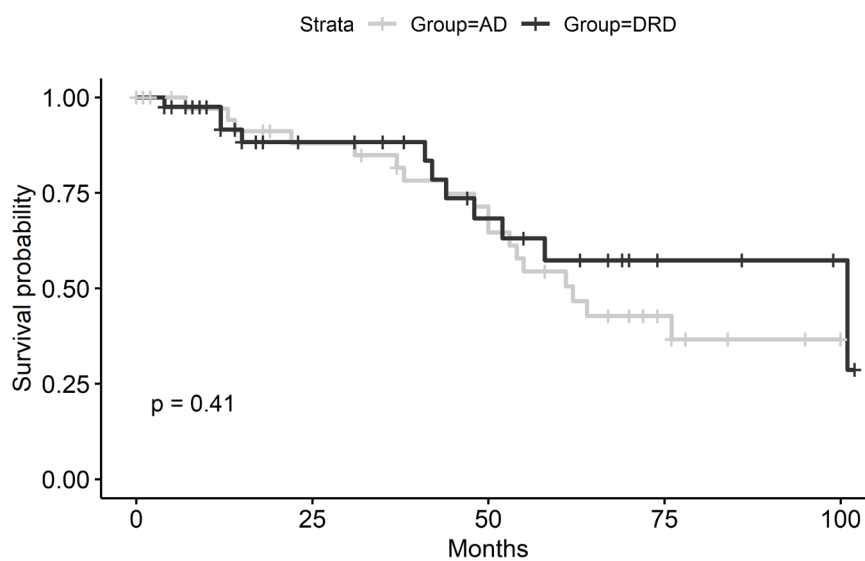
|   |              | All ethnicities (n=78) |                |         | Pacific subgroup (n=31) |               |         |
|---|--------------|------------------------|----------------|---------|-------------------------|---------------|---------|
|   |              | DRD (n=40)             | AD (n=38)      | p-value | DRD (n=19)              | AD (n=12)     | p-value |
|   |              | Mean (SD)              |                |         | Mean (SD)               |               |         |
| Cognitive scores**<br>(Mean and median scores)      |              | ACE-III (n=19)         | ACE-III (n=20) | p-value | ACE-III (n=5)           | ACE-III (n=3) | p-value |
|   |              | RUDAS (n=17)           | RUDAS (n=15)   |         | RUDAS (n=12)            | RUDAS (n=9)   |         |
| Total ACE-III score                                 | Mean (SD)    | 63.6 (11.4)            | 63.3 (11.8)    | 0.932   | 52.9 (9.3)              | 58 (15.7)     | 0.638   |
| Total RUDAS score (max 30)                          | Median (IQR) | 19 (16, 21)            | 15 (13, 17)    | 0.068   | 20 (18.8, 21)           | 15 (12, 16)   | 0.014   |
| Total RUDAS score                                   | Mean (SD)    | 18.4 (4.1)             | 15.7 (4.3)     | 0.083   | 19.4 (3.0)              | 14.7 (3.9)    | 0.008   |
| Total memory score: ACE-III or RUDAS (standardised) | Mean (SD)    | 0.37 (0.24)            | 0.31 (0.26)    | 0.285   | 0.32 (0.20)             | 0.19 (0.27)   | 0.232   |
| ACE-III memory sub-score (max 26)                   | Median (IQR) | 12 (9.5, 14)           | 10 (6, 13)     | 0.112   | 9 (9, 10)               | 12 (11, 12)   | 0.089   |
| ACE-III memory sub-score                            | Mean (SD)    | 11.9 (4.5)             | 9.9 (4.1)      | 0.13    | 9 (3.3)                 | 12 (1.2)      | 0.054   |
| RUDAS memory sub-score (max 8)                      | Median (IQR) | 2 (0, 2)               | 0 (0, 0)       | 0.304   | 2 (1.5, 2.5)            | 0 (0, 0)      | 0.047   |
| RUDAS memory sub-score                              | Mean (SD)    | 1.7 (2.0)              | 1.4 (2.8)      | 0.75    | 2.3 (2.0)               | 0.8 (2.1)     | 0.054   |
| ACE-III attention sub-score (max 18)                | Median (IQR) | 13 (11, 14)            | 13 (11, 16)    | 0.730   | 13 (11, 13)             | 12 (11.5, 14) | 0.815   |
| ACE-III attention sub-score                         | Mean (SD)    | 12.5 (2.0)             | 12.9 (3.4)     | 0.67    | 11.9 (2.0)              | 13 (2.7)      | 0.55    |

**Figure 1:** Flowchart showing the finding of the DRD and AD subgroups.



**Figure 2:** Kaplan–Meier plots for survival by DRD group and AD subgroup.

Whole group, all ethnicities (n=78).



Pacific subgroup (n=31).

