# Immunogenicity of SARS-CoV-2 Vaccine in Dialysis

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Table S1. Characteristics of maintenance dialysis patients by vaccine received.

| Demographics | All Patients (N=186) | BNT162b2 (Pfizer) N=168 | mRNA-1273 (Moderna) N=18 |
|---|---|---|---|
| COVID Vaccine Response | 165 (88.7) | 148 (88.1) | 17 (94.4) |
| **Age** (years) | 67.9 ± 12.2 | 67.6 ± 12.3 | 71.2 ± 10.6 |
| <55 | 29 (15.6) | 28 (16.7) | 1 (5.6) |
| 55-64 | 34 (18.3) | 31 (18.5) | 3 (16.7) |
| 65-74 | 71 (38.2) | 64 (38.1) | 7 (38.9) |
| 75+ | 52 (28.0) | 45 (26.8) | 7 (38.9) |
| **Female** | 88 (47.3) | 77 (45.8) | 11 (61.1) |
| **Race** | | | |
| White | 73 (39.3) | 64 (38.1) | 9 (50.0) |
| Black | 39 (21.0) | 34 (20.2) | 5 (27.8) |
| Native American | 33 (17.7) | 30 (17.9) | 3 (16.7) |
| Asian/Pacific Islander | 19 (10.2) | 19 (11.3) | 0 (0.0) |
| Other/Unknown | 22 (11.8) | 21 (12.5) | 1 (5.6) |
| **Hispanic** | 15 (8.1) | 15 (8.9) | 0 (0.0) |
| **Vintage** (months) | 58.1 ± 54.3 | 58.4 ± 54.9 | 55.5 ± 50.3 |
| **Body Mass Index** (kg/m$^2$) | 28.7 ± 7.1 | 28.8 ± 7.3 | 28.2 ± 5.7 |
| **Long Term Care Facility Resident** | 48 (25.8) | 40 (23.8) | 8 (44.4) |
| **Modality** | | | |
| In-Center Hemodialysis | 180 (96.8) | 164 (97.6) | 16 (88.9) |
| Peritoneal Dialysis | 5 (2.7) | 3 (1.8) | 2 (11.1) |
| Home Hemodialysis | 1 (0.5) | 1 (0.6) | 0 (0.0) |
| **Adequate Dialysis Dose[b]** | 174 (93.6) | 158 (94.1) | 16 (88.9) |
| **Serum Albumin** (g/dl) | 3.8 ± 0.4 | 3.8 ± 0.4 | 3.8 ± 0.5 |
| **Other Vaccines within 14 days** | 20 (10.8) | **15 (8.9)** | **5 (27.8)[a]** |
| Pneumococcal | 4 (2.2) | **2 (1.2)** | **2 (11.1)[a]** |
| Hepatitis B | 17 (9.1) | **13 (7.7)** | **4 (22.2)[a]** |
| **Potential Immunosuppression** | 36 (19.4) | 31 (18.5) | 5 (27.8) |
| Immune-modulating Meds | 29 (15.6) | 24 (14.3) | 5 (27.8) |
| Prior Transplant | 11 (5.9) | 11 (6.6) | 0 (0.0) |
| Immunodeficiency Disorder | 10 (5.4) | 9 (5.4) | 1 (5.6) |
| **Hospitalization within 14 days** | 34 (18.3) | 31 (18.5) | 3 (16.7) |
| **Disability[c]** | 17 (9.1) | 14 (8.3) | 3 (16.7) |
| **Tobacco Use** | 22 (11.8) | 21 (12.5) | 1 (5.6) |
| **Alcohol Use Disorder** | 14 (7.5) | 14 (8.3) | 0 (0.0) |
| **Substance Use Disorder** | 8 (4.3) | 7 (4.2) | 1 (5.6) |
| **History of COVID-19** | 38 (20.4) | 35 (20.8) | 3 (16.7) |
| **Number of Comorbidities** | 3.2 ± 1.9 | 3.2 ± 1.8 | 3.2 ± 1.9 |
| **Comorbid Conditions** | | | |
| Diabetes Mellitus | 129 (69.4) | 116 (69.1) | 13 (72.2) |
| Hypertension | 152 (81.7) | 137 (81.6) | 15 (83.3) |
| Congestive Heart Failure | 37 (19.9) | 33 (19.6) | 4 (22.2) |

| | | | |
|---|---|---|---|
| COPD[d] | 34 (18.3) | 32 (19.1) | 2 (11.1) |
| Stroke/Cerebrovascular Disorder | 23 (12.4) | 20 (11.9) | 3 (16.7) |
| Peripheral Vascular Disease | 25 (13.4) | 24 (14.3) | 1 (5.6) |
| Thyroid Disorder | 36 (19.4) | 32(19.1) | 4 (22.2) |
| History of Cancer | 18 (9.7) | 17 (10.1) | 1 (5.6) |

Values are presented as mean ± standard deviation or number (percent). [a] P-value<0.05; [b] Adequate dialysis defined by hemodialysis dose spKt/V≥1.2 or peritoneal dialysis dose weekly Kt/V≥1.7; [c] Amputee, wheelchair use or inability to perform activities of daily living; [d] COPD = Chronic Obstructive Pulmonary Disease.

Table S2. Three patients with COVID-19 history and prior antibody results.

| Patient | Days from COVID-19 Diagnosis to Baseline Antibody (Ab) Test | Days from COVID-19 Diagnosis to 1st Vaccine Shot | Results of Baseline Ab Test | Days from 2nd Shot to Post-Vaccine Ab Test | Results of Post-Vaccine Ab Test |
|---|---|---|---|---|---|
| #1 | 234 | 242 | 20 U/L | 22 | 20 U/L |
| #2 | 291* | 286 | 20 U/L | 19 | 20 U/L |
| #3 | 300* | 295 | 3.61 U/L | 19 | 20 U/L |

* Pseudo-baseline test result: drawn 5 days after the first vaccine dose.