# Supplemental Material

**Supplemental Table S1.** Bivariate analysis of clinical characteristics of patients that had midline catheter-related thrombosis vs. no thrombosis*

| | **Thrombosis** | | | |
|---|---|---|---|---|
| | **No (*N* = 34)** | **Yes (*N* = 15)** | **Total (*N* = 49)** | ***p* value** |
| **Age** | 66.1 (11.2) | 62.7 (12.9) | 65.1 (11.7) | 0.344 |
| **Age by categories** | | | | 0.315 |
| 18–44 | 1.0 (2.9%) | 2.0 (13.3%) | 3.0 (6.1%) | |
| 45–64 | 10.0 (29.4%) | 6.0 (40.0%) | 16.0 (32.7%) | |
| 65–74 | 17.0 (50.0%) | 4.0 (26.7%) | 21.0 (42.9%) | |
| >75 | 6.0 (17.6%) | 3.0 (20.0%) | 9.0 (18.4%) | |
| **Sex** | | | | 0.43 |
| Male | 14.0 (41.2%) | 8.0 (53.3%) | 22.0 (44.9%) | |
| Female | 20.0 (58.8%) | 7.0 (46.7%) | 27.0 (55.1%) | |
| **Ethnicity** | | | | 0.604 |
| Hispanic or Latino | 14.0 (41.2%) | 5.0 (33.3%) | 19.0 (38.8%) | |
| Not Hispanic or Latino | 20.0 (58.8%) | 10.0 (66.7%) | 30.0 (61.2%) | |
| **Race** | | | | 0.332 |
| Black or African American | 20.0 (58.8%) | 11.0 (73.3%) | 31.0 (63.3%) | |
| White | 14.0 (41.2%) | 4.0 (26.7%) | 18.0 (36.7%) | |
| **height (m)** | 1.7 (0.1) | 1.7 (0.1) | 1.7 (0.1) | 0.605 |
| **weight (kg)** | 82.0 (24.1) | 77.1 (16.8) | 80.5 (22.1) | 0.474 |
| **Body Mass Index** | 28.9 (7.1) | 27.0 (5.8) | 28.3 (6.7) | 0.359 |
| **HTN** | | | | 0.128 |
| No | 0.0 (0.0%) | 1.0 (6.7%) | 1.0 (2.0%) | |
| Yes | 34.0 (100.0%) | 14.0 (93.3%) | 48.0 (98.0%) | |
| **DM** | | | | 0.946 |

| | | | | |
|---|---|---|---|---|
| No | 11.0 (32.4%) | 5.0 (33.3%) | 16.0 (32.7%) | |
| Yes | 23.0 (67.6%) | 10.0 (66.7%) | 33.0 (67.3%) | |
| **Hyperlipidemia** | | | | 0.83 |
| No | 17.0 (50.0%) | 7.0 (46.7%) | 24.0 (49.0%) | |
| Yes | 17.0 (50.0%) | 8.0 (53.3%) | 25.0 (51.0%) | |
| **CAD** | | | | 0.451 |
| No | 22.0 (64.7%) | 8.0 (53.3%) | 30.0 (61.2%) | |
| Yes | 12.0 (35.3%) | 7.0 (46.7%) | 19.0 (38.8%) | |
| **PAD** | | | | 0.166 |
| No | 30.0 (88.2%) | 15.0 (100.0%) | 45.0 (91.8%) | |
| Yes | 4.0 (11.8%) | 0.0 (0.0%) | 4.0 (8.2%) | |
| **CHF** | | | | 0.205 |
| No | 16.0 (47.1%) | 10.0 (66.7%) | 26.0 (53.1%) | |
| Yes | 18.0 (52.9%) | 5.0 (33.3%) | 23.0 (46.9%) | |
| **Hypercoagulability** | | | | 0.502 |
| No | 33.0 (97.1%) | 15.0 (100.0%) | 48.0 (98.0%) | |
| Yes | 1.0 (2.9%) | 0.0 (0.0%) | 1.0 (2.0%) | |
| **Malignancy** | | | | 0.799 |
| No | 31.0 (91.2%) | 14.0 (93.3%) | 45.0 (91.8%) | |
| Yes | 3.0 (8.8%) | 1.0 (6.7%) | 4.0 (8.2%) | |
| **CKD-V** | | | | 0.235 |
| No | 31.0 (91.2%) | 15.0 (100.0%) | 46.0 (93.9%) | |
| Yes | 3.0 (8.8%) | 0.0 (0.0%) | 3.0 (6.1%) | |
| **ESKD** | | | | 0.235 |
| No | 3.0 (8.8%) | 0.0 (0.0%) | 3.0 (6.1%) | |
| Yes | 31.0 (91.2%) | 15.0 (100.0%) | 46.0 (93.9%) | |
| **Immunosuppression** | | | | 0.338 |
| No | 32.0 (94.1%) | 15.0 (100.0%) | 47.0 (95.9%) | |
| Yes | 2.0 (5.9%) | 0.0 (0.0%) | 2.0 (4.1%) | |

| | | | | |
|---|---|---|---|---|
| **HIV** | | | | 0.235 |
| No | 31.0 (91.2%) | 15.0 (100.0%) | 46.0 (93.9%) | |
| Yes | 3.0 (8.8%) | 0.0 (0.0%) | 3.0 (6.1%) | |
| **Previous surgery** | | | | 0.24 |
| No | 26.0 (76.5%) | 9.0 (60.0%) | 35.0 (71.4%) | |
| Yes | 8.0 (23.5%) | 6.0 (40.0%) | 14.0 (28.6%) | |
| **Level of care** | | | | 0.449 |
| In-patient non-ICU | 23.0 (67.6%) | 12.0 (80.0%) | 35.0 (71.4%) | |
| ICU | 8.0 (23.5%) | 3.0 (20.0%) | 11.0 (22.4%) | |
| ER | 3.0 (8.8%) | 0.0 (0.0%) | 3.0 (6.1%) | |
| **Dwell time categories** | | | | 0.435 |
| <6 (Reference) | 8.0 (23.5%) | 7.0 (46.7%) | 15.0 (30.6%) | |
| 6–14 | 14.0 (41.2%) | 4.0 (26.7%) | 18.0 (36.7%) | |
| 15–30 | 7.0 (20.6%) | 2.0 (13.3%) | 9.0 (18.4%) | |
| >30 | 5.0 (14.7%) | 2.0 (13.3%) | 7.0 (14.3%) | |
| | **No (*N* = 33)** | **Yes (*N* = 15)** | **Total (*N* = 48)** | ***p* value** |
| **# of lumen (s)** | | | | 0.378 |
| One lumen | 24.0 (72.7%) | 9.0 (60.0%) | 33.0 (68.8%) | |
| Two lumens | 9.0 (27.3%) | 6.0 (40.0%) | 15.0 (31.2%) | |
| **Midline catheter indwell location** | | | | 0.176 |
| Cephalic vein | 2.0 (6.1%) | 0.0 (0.0%) | 2.0 (4.2%) | |
| Basilic vein | 18.0 (54.5%) | 5.0 (33.3%) | 23.0 (47.9%) | |
| Brachial vein | 13.0 (39.4%) | 10.0 (66.7%) | 23.0 (47.9%) | |

* Continuous variables are presented as mean (standard deviation). Categorical variables are presented as counts (percentages)

**Supplemental Table S2.** Counts of midline catheter-related thrombosis events for select patient or device characteristics

| Predictor | Category | Thrombosis: No | Thrombosis: Yes | Total |
|---|---|---|---|---|
| **# of lumen(s)** | One lumen | 24 | 9 | 33 |
| | Two lumens (Reference) | 9 | 6 | 15 |
| **Dwell time categories** | <6 (Reference) | 8 | 7 | 15 |
| | 6–14 | 14 | 4 | 18 |
| | 15–30 | 7 | 2 | 9 |
| | >30 | 5 | 2 | 7 |
| **Previous Midline/PICC** | No (Reference) | 28 | 14 | 42 |
| | Yes | 6 | 1 | 7 |
| **Malignancy** | No (Reference) | 31 | 14 | 45 |
| | Yes | 3 | 1 | 4 |
| **Previous surgery** | No (Reference) | 26 | 9 | 35 |
| | Yes | 8 | 6 | 14 |