

Bypass graft に対するTrans-radial PCIの有用性について

－ Trans femoral PCIとの比較検討 －

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COI Disclosure

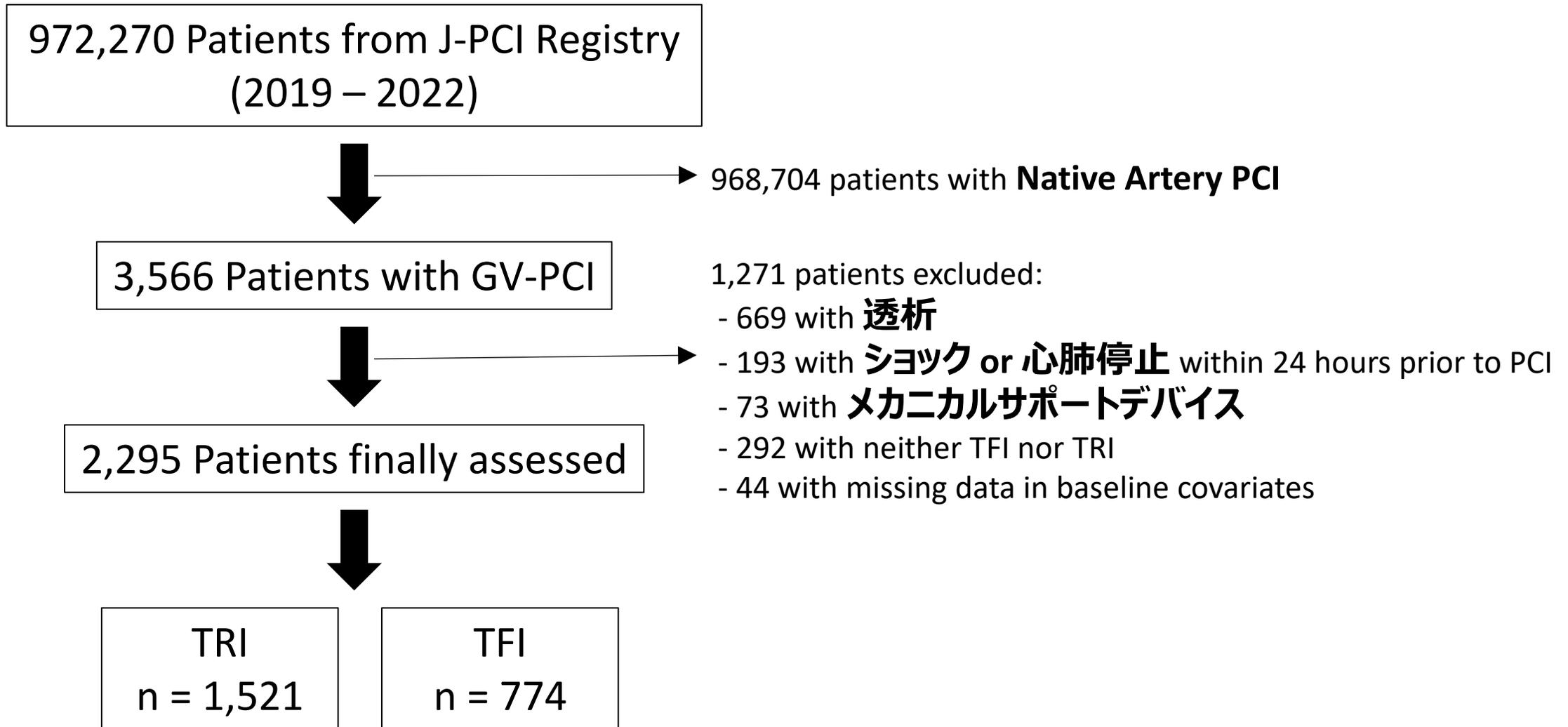
No conflict of interest is declared with regard to the presentation.

目的

J-PCIレジストリーを用いて

Bypass graft に対するTRIの有用性をTFIと比較し検証すること

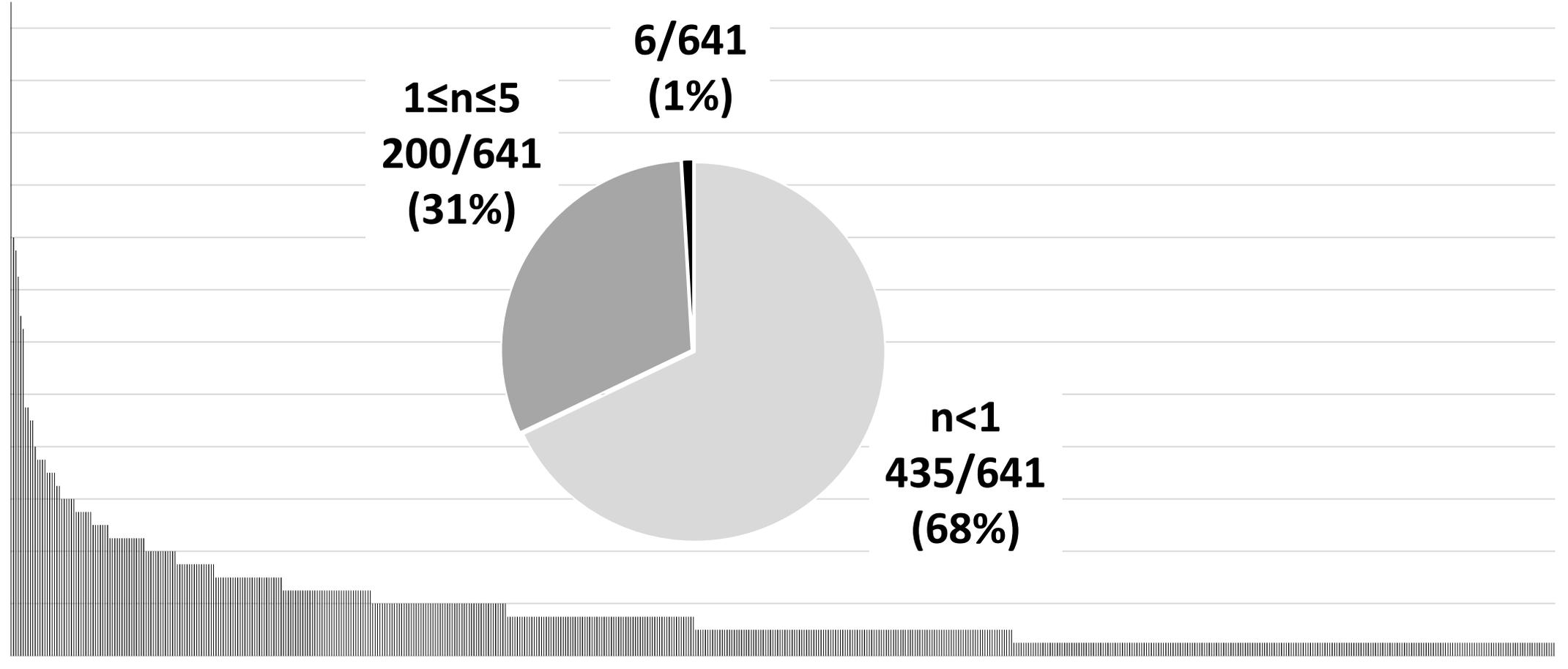
Study population



施設毎のGV-PCIの年間症例数

(cases/year)

12
11
10
9
8
7
6
5
4
3
2
1
0



Hospitals
(N = 641)

Patient and procedural characteristics (1)

| Variables | TRI (n = 1,521) | TFI (n = 774) | P value |
|-----------------------|----------------------------|--------------------------|----------------|
| Age, years | 75.1 ± 9.14 | 73.9 ± 9.85 | 0.004 |
| Female | 276 (18%) | 177 (23%) | 0.008 |
| Hypertension | 1,239 (82%) | 658 (85%) | 0.039 |
| Diabetes | 847 (56%) | 453 (59%) | 0.21 |
| Hyperlipidemia | 1,242 (82%) | 643 (83%) | 0.44 |
| Smoker | 371 (24%) | 175 (23%) | 0.37 |
| CKD | 465 (31%) | 282 (36%) | 0.005 |
| Prior MI | 730 (48%) | 399 (51.6%) | 0.12 |
| Prior HF | 467 (31%) | 275 (36%) | 0.022 |

Patient and procedural characteristics (2)

| Variables | TRI (n = 1,521) | TFI (n = 774) | P value |
|--|----------------------------|--------------------------|-------------------|
| Clinical presentation | | | < 0.001 |
| ACS | 512 (34%) | 331 (43%) | |
| Non-ACS | 1,009 (66%) | 443 (57%) | |
| Acute heart failure within 24 h | 32 (2%) | 37 (5%) | < 0.001 |
| Emergent PCI | 295 (19%) | 214 (28%) | < 0.001 |
| Graft | | | 0.005 |
| Saphenous vein | 1,211 (80%) | 576 (74%) | |
| Arterial graft | 310 (20%) | 198 (26%) | |
| DES use | 938 (62%) | 451 (58%) | 0.13 |
| DCB use | 508 (33%) | 274 (35%) | 0.36 |
| Distal protection use | 181 (12%) | 76 (10%) | 0.15 |

In-hospital clinical outcomes

| Outcomes | TRI (n = 1,521) | TFI (n = 774) | P value |
|--|----------------------------|--------------------------|----------------|
| Composite of in-hospital death and all bleeding | 14 (0.9%) | 15 (1.9%) | 0.039 |
| In-hospital death | 10 (0.7%) | 7 (0.9%) | 0.51 |
| Major bleeding | 4 (0.3%) | 8 (1.0%) | 0.027 |
| Access site bleeding | 2 (0.1%) | 5 (0.6%) | 0.047 |
| Non-access site bleeding | 2 (0.1%) | 3 (0.4%) | 0.34 |
| Cardiac tamponade | 0 | 1 (0.1%) | 0.34 |
| Cardiogenic shock | 4 (0.3%) | 4 (0.5%) | 0.46 |
| Stent thrombosis | 0 | 0 | NA |
| Emergent surgery | 0 | 0 | NA |
| Any complications | 17 (1.1%) | 17 (2.2%) | 0.043 |

Logistic regression analysis for the primary outcome (Composite of death and all bleeding)

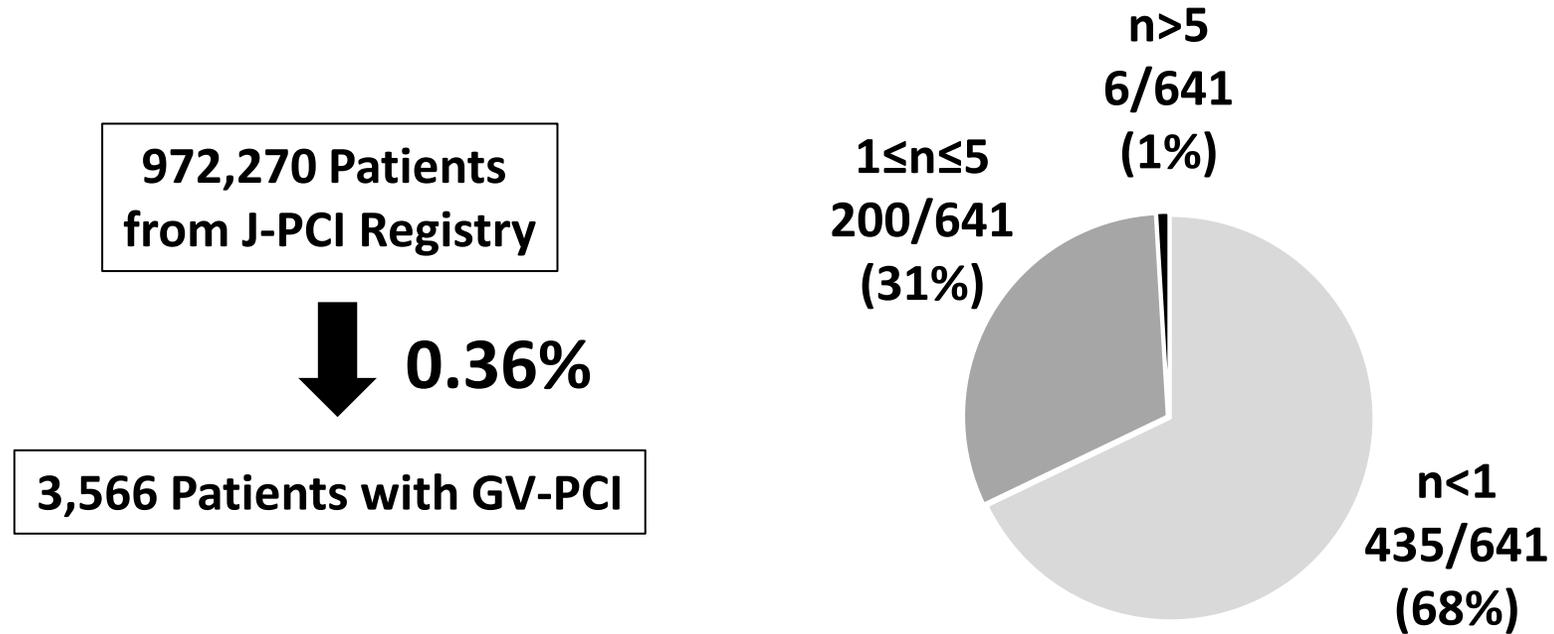
| variables | Univariable | | | Multivariable | | |
|----------------|-------------|-----------|--------------|---------------|-----------|-------------|
| | OR | 95% CI | P value | OR | 95% CI | P value |
| Female | 2.92 | 1.35-6.12 | 0.007 | 2.45 | 1.11-5.27 | 0.03 |
| CKD | 2.98 | 1.43-6.43 | 0.004 | 2.45 | 1.14-5.41 | 0.02 |
| ACS | 2.86 | 1.36-6.28 | 0.005 | 2.49 | 1.16-5.54 | 0.02 |
| TRI | 0.47 | 0.22-0.98 | 0.044 | 0.57 | 0.27-1.22 | 0.14 |
| PAD | 2.48 | 1.02-5.44 | 0.045 | 1.95 | 0.79-4.41 | 0.12 |
| Age | 1.04 | 0.99-1.09 | 0.091 | 1.01 | 0.97-1.06 | 0.55 |
| COPD | 3.03 | 0.71-8.84 | 0.12 | - | - | - |
| Hypertension | 0.46 | 0.21-1.07 | 0.070 | - | - | - |
| Diabetes | 1.09 | 0.52-2.34 | 0.80 | - | - | - |
| Hyperlipidemia | 0.57 | 0.26-1.37 | 0.20 | - | - | - |

Odds ratios of TRI for in-hospital complications

| Outcomes | Crude | | Adjusted* | |
|---|------------------|--------------|------------------|--------------|
| | OR (95% CI) | P value | OR (95% CI) | P value |
| Major bleeding | 0.25 (0.07-0.80) | 0.020 | 0.29 (0.07-0.93) | 0.037 |
| Access site bleeding | 0.20 (0.03-0.94) | 0.042 | 0.21 (0.03-1.01) | 0.052 |
| Non-access site bleeding | 0.34 (0.04-2.05) | 0.20 | 0.38 (0.05-2.32) | 0.29 |
| In-hospital death | 0.73 (0.28-2.00) | 0.50 | 0.91 (0.27-1.22) | 0.85 |
| Cardiogenic shock | 0.51 (0.12-2.15) | 0.30 | 0.48 (0.11-2.08) | 0.31 |
| Composite of in-hospital death and all bleeding | 0.47 (0.22-0.98) | 0.045 | 0.57 (0.27-1.22) | 0.14 |
| Any complications | 0.50 (0.25-1.00) | 0.049 | 0.59 (0.11-2.08) | 0.14 |

* Adjusted for age, sex, ACS, CKD, and PAD

Summary and Discussion 1

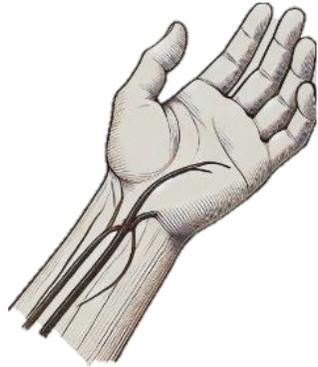


GV-PCIが必要な患者に出会うことは少ない（遭遇した際に適切に対処できるよう準備は必要）

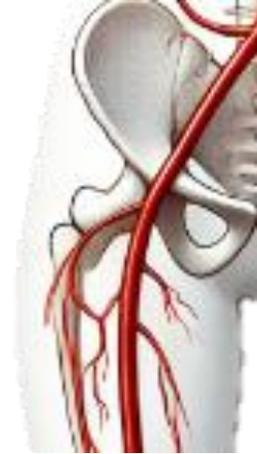


大規模データ(J-PCI)での解析、情報共有の重要性

Summary and Discussion 2



VS



0.3% ↓

Major bleeding

1.0%

0.1% ↓

Access site bleeding

0.6%

0.7%

In-hospital death

0.9%



GV-PCIにおいても(臨床的、解剖学的な状況が許せば)TRIがfirst-lineになりうる

結語

GV-PCIにおいて、TRIはTFIに比べて出血イベントが少なかった

謝辞

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2023/12 Research proposal 採択

2024/1 解析終了

2024/2 Draft作成

2024/5 American Journal of Cardiology に Accept