



Abords vasculaires pour hémodialyse

.....
MONTPELLIER

Apports récents de DOPPS en matière d'abords vasculaires



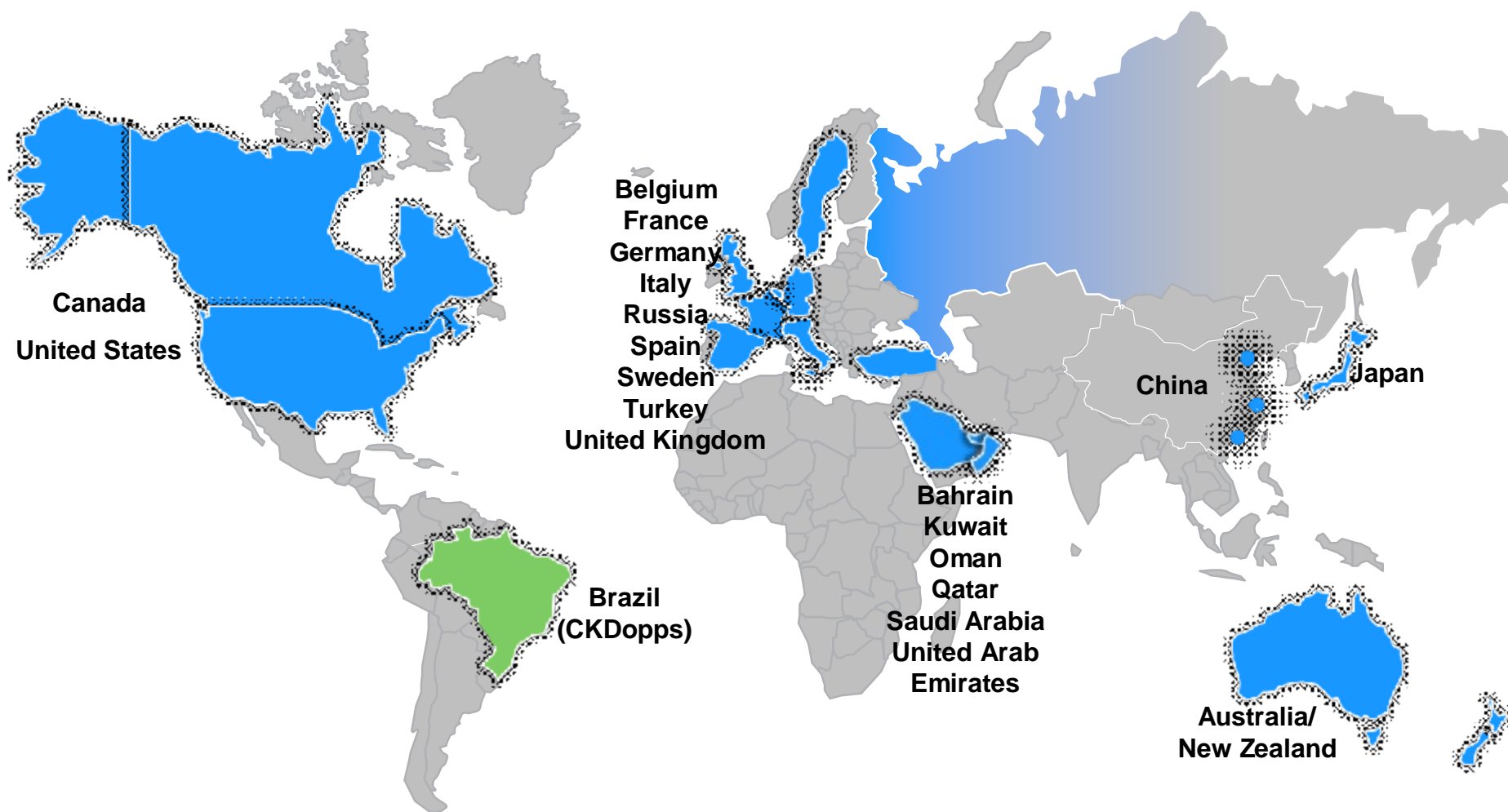
Prof. Michel Jadoul
Service de Néphrologie
Cliniques universitaires Saint-Luc
Bruxelles, Belgique

UCL
Université
catholique
de Louvain

Déclaration d'intérêt(s)

- Service de Néphrologie des Cliniques universitaires Saint-Luc (UCL, Bruxelles), que je dirige : subventions de recherche de Baxter, Fresenius, Janssen-Cilag (JJ), Amgen, Roche
- Moi-même: honoraires et/ou rembt de frais de déplacement: Amgen, Fresenius, Great Lakes Pharma, Menarini, Nipro, Roche, Takeda, ZS-Pharma
- Je suis membre du comite exécutif KDIGO
council ERA-EDTA
investigateur DOPPS pour la Belgique

The DOPPS Program Worldwide



DOPPS

Cadre conceptuel

Collecte prospective de données

Démographiques

+

Comorbidités

+

Pratiques en dialyse

Résultats

Mortalité

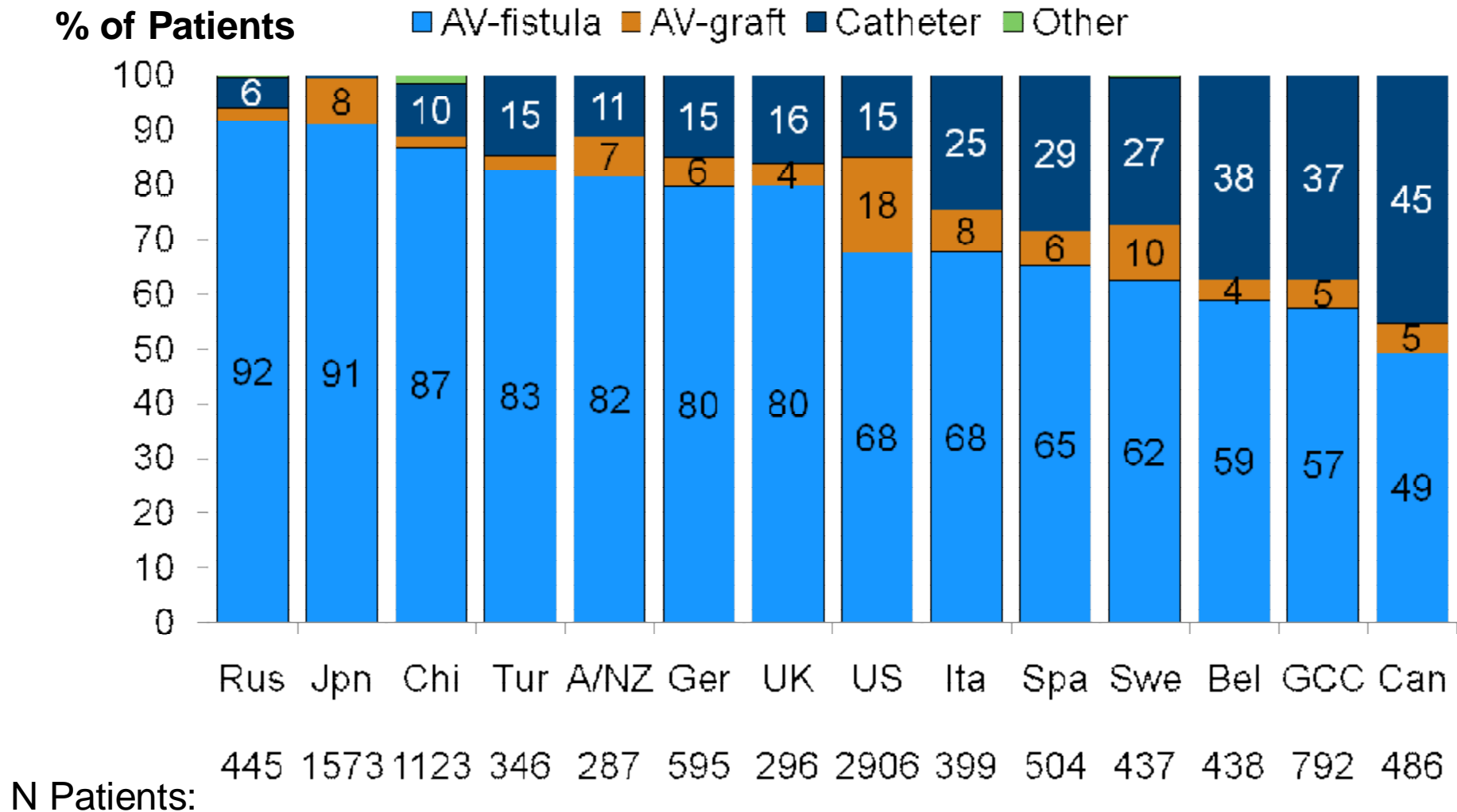
Hospitalisation

Abord vasculaire

Qualité de vie

Vascular access - prevalent* patients

DOPPS 5 (2012-2014)



* Data from GCC, Rus, Tur, Bel, Swe, Chi based on VA at the initial cross-section of DOPPS 5;

data from remaining countries based on cross-section of HD patients in Aug 2013 Pisoni et al. *AJKD* (2015)

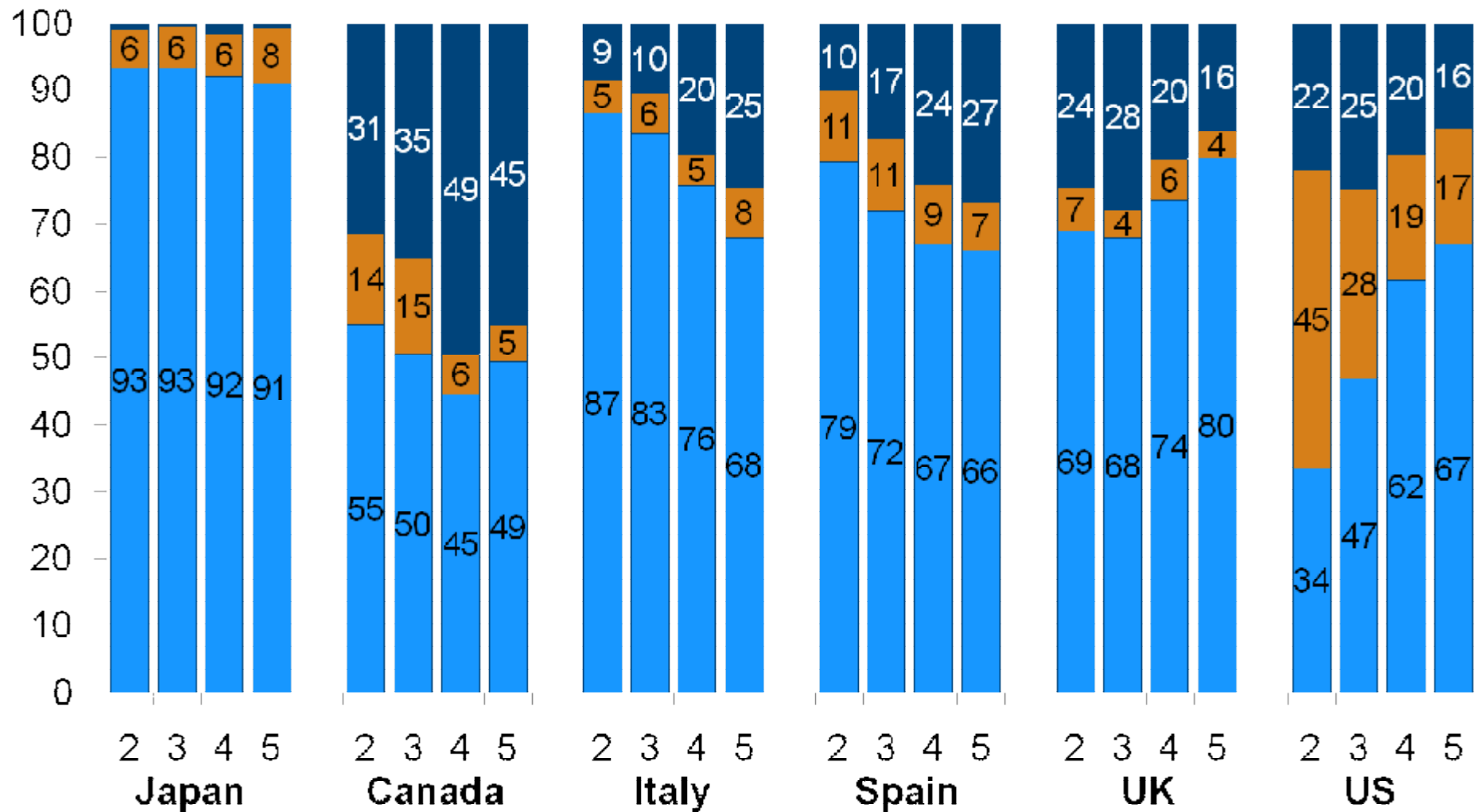
Notable Country Trends in Vascular Access Use

% of patients

■ Catheter

■ AV-Graft

■ AV-Fistula



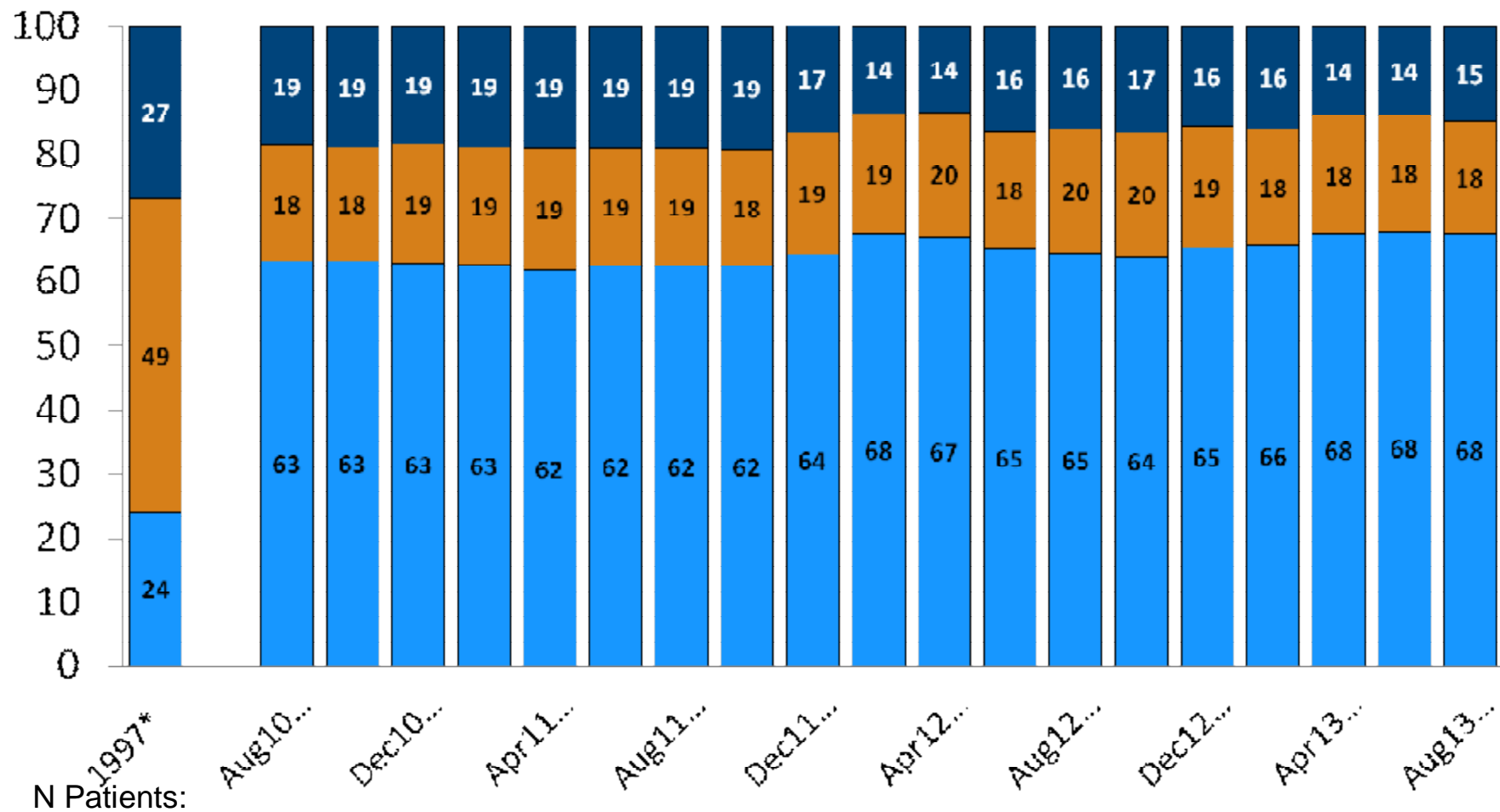
Prevalent cross-sections, DOPPS 2 (2002-2004), DOPPS 3 (2005-2008), DOPPS 4 (2009-2011); DOPPS 5 (August 2013)

Vascular access - prevalent patients

US DOPPS 5 (2012-2014)

% of Patients

■ Catheter ■ AV-Graft ■ AV-Fistula

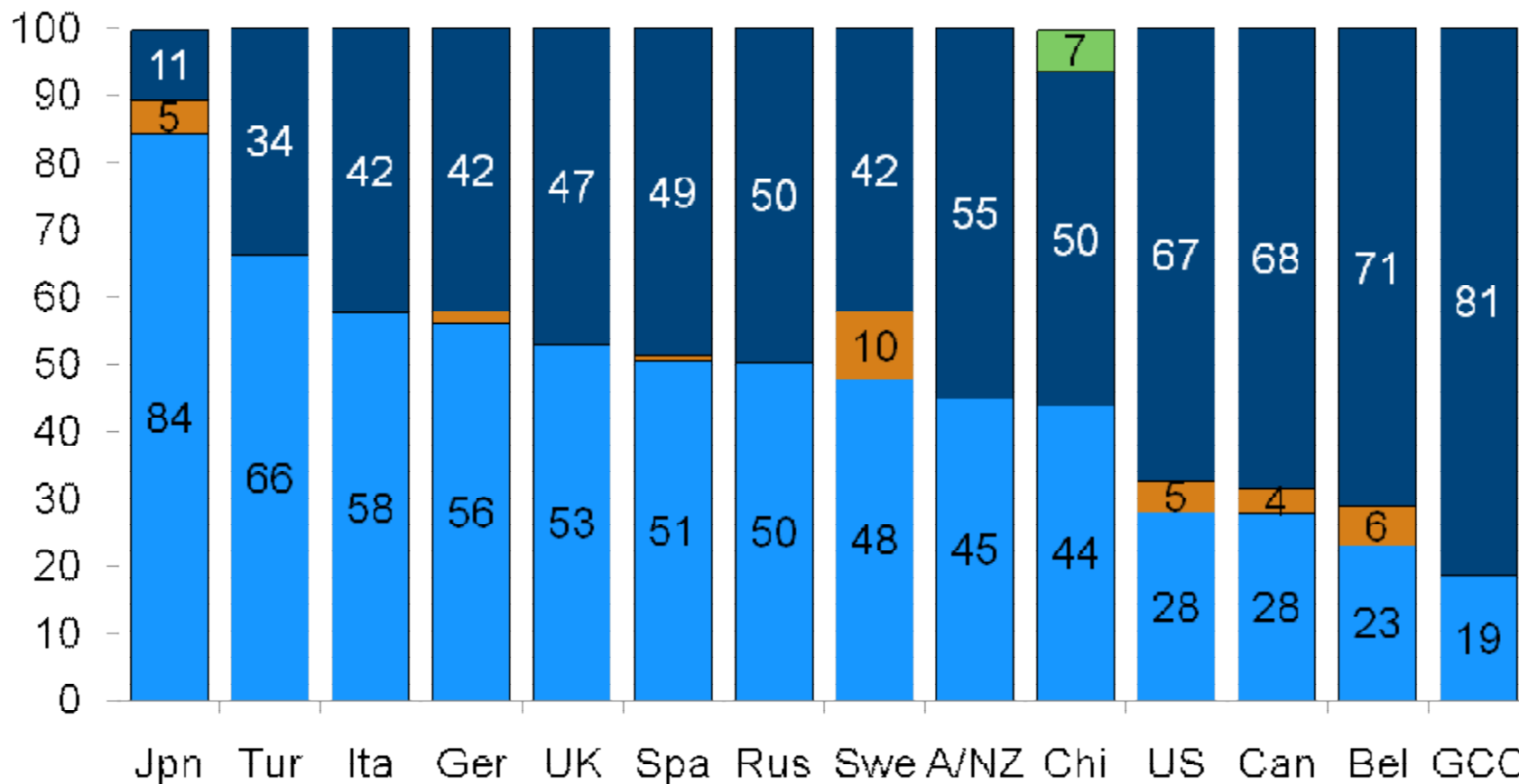


Vascular access – incident^a patients

DOPPS 5 (2012-2014)

% of Patients

Other Catheter AV-Graft AV-Fistula



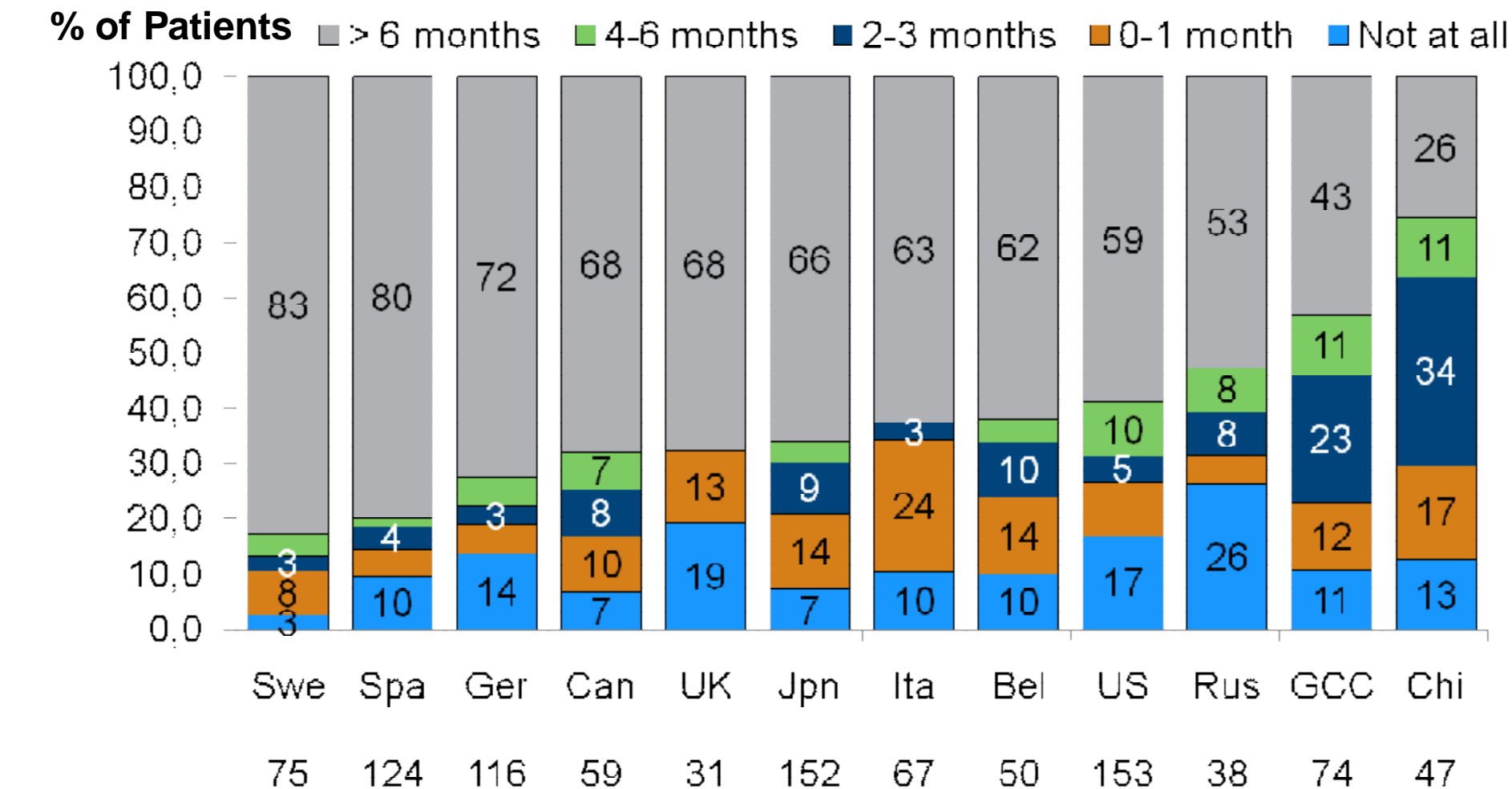
N Patients:

... ..

a. ≤ 60 days on dialysis at DOPPS enrollment

Timing of 1st nephrology care before HD*

DOPPS 5 (2012-2014)

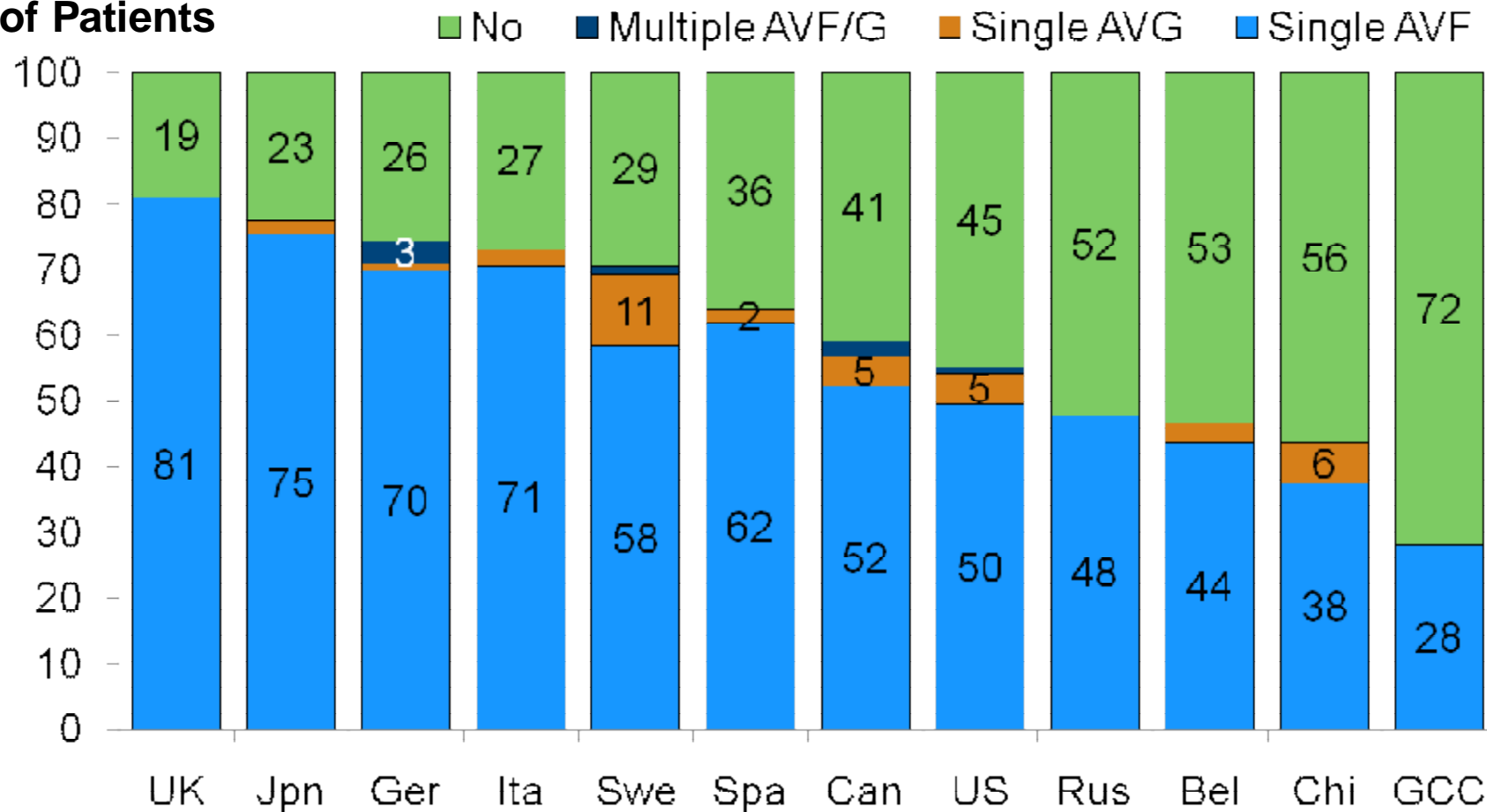


* ≤ 60 days on dialysis at DOPPS enrollment

AV access placed before HD^{a,b}

DOPPS 5 (2012-2014)

% of Patients



N Patients:

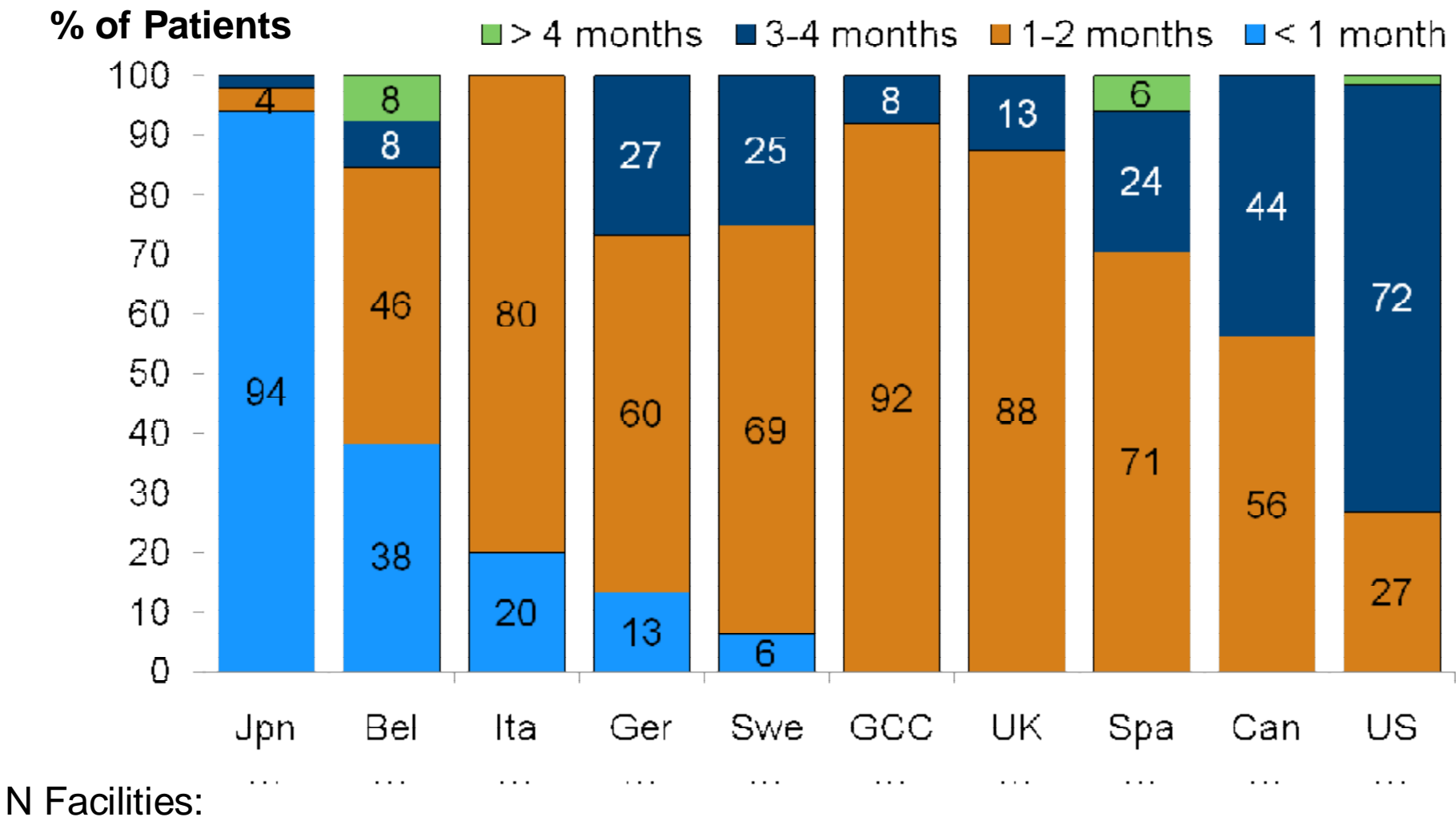
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a. ≤ 60 days on dialysis at DOPPS enrollment
 b. At least 4 months of pre-dialysis nephrology care

Time to AVF cannulation after surgery^a

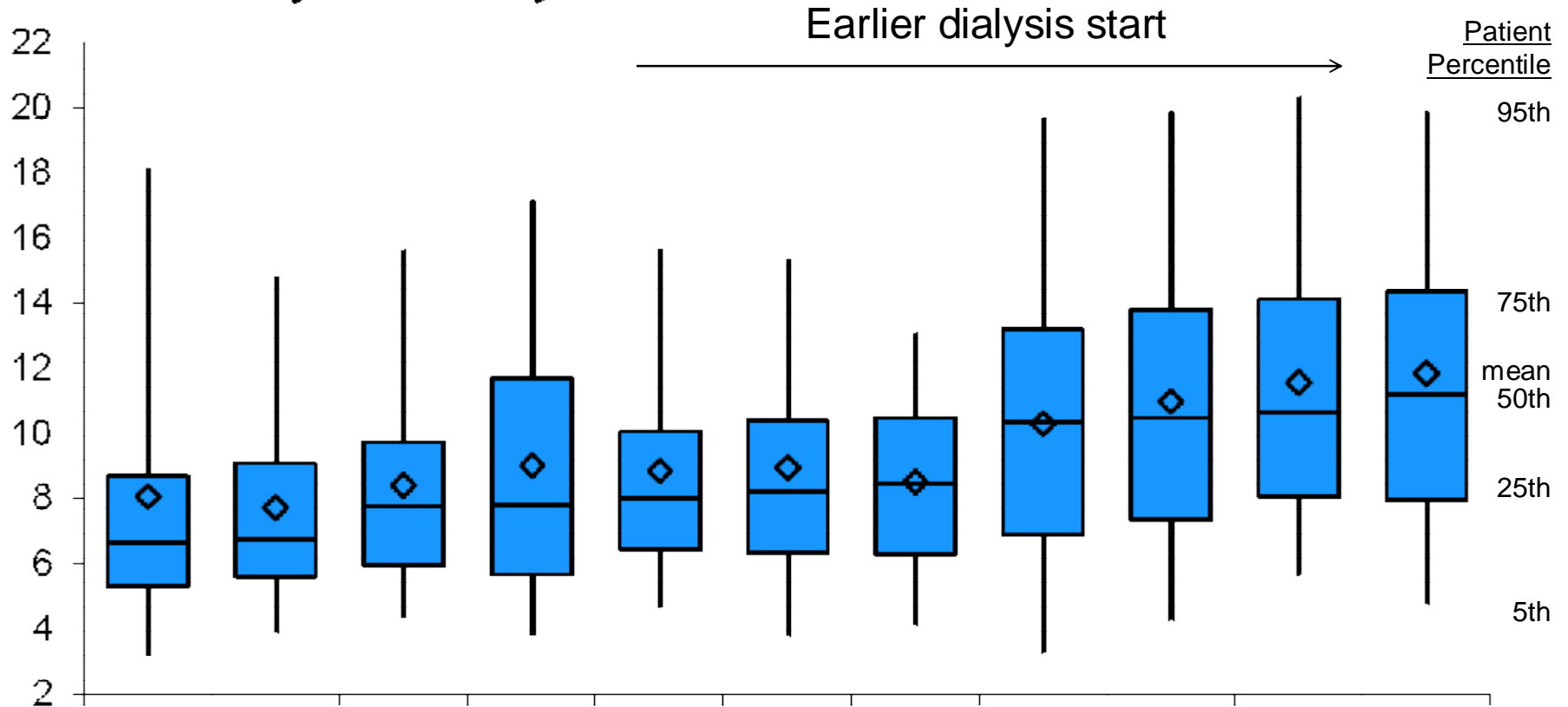
DOPPS 5 (2012-2014)



a. Based on response to medical director survey

Large Country Differences in eGFR Immediately Before Dialysis Start

eGFR* immediately before dialysis



N Pts=

* Calculated using the MDRD 4 variable equation; Median eGFR at start in Japan is similar to JSDT data (6.5 ml/min/1.73m² in Yamagata et al, 2011); Country differences remained after adjusting for age, gender, comorbidities, and accounting for facility clustering

Associations with use of AV access at dialysis start

Variable	Unadjusted Odds Ratio (95% CI)	Adjusted ^a Odds Ratio (95% CI)
eGFR at dialysis start (per 2.5 mL/min lower)	1.14(1.05,1.24)*	1.13(1.00,1.28)*
Frequency of pre-HD care ^b		
0 visits	0.62(0.34,1.13)	0.33(0.15,0.74)*
1 visit	1.00(ref)	1.00(ref)
2-4 visits	2.42(1.43,4.07)*	2.54(1.31,4.94)*
5+ visits	4.03(2.30,7.06)*	4.39(2.19,8.82)*

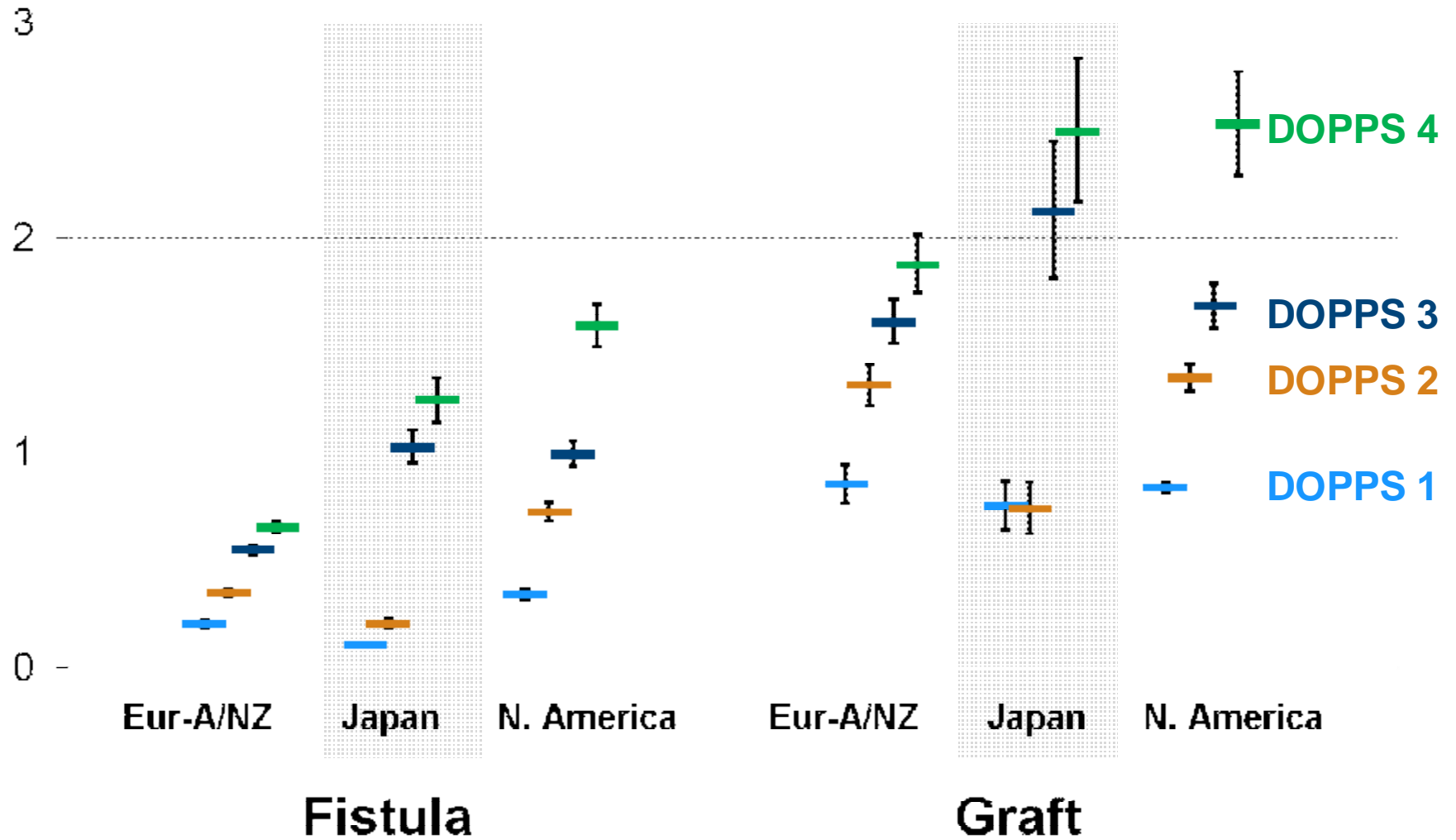
a. Adjusted for listed variables plus age, vintage, country and US-black race, 12 summary comorbid conditions, and facility clustering; Among patients on dialysis < 120 days at DOPPS enrollment; For patients missing data on access at dialysis start (42%), access at DOPPS enrollment was used (median [interquartile range] of days on dialysis at DOPPS enrollment was 69 [36-93] days for these patients)

b. Number of visits in the year before starting dialysis

* p < 0.05

Trends in Fistula and Graft Procedure Rates

Rate/Patient-Year

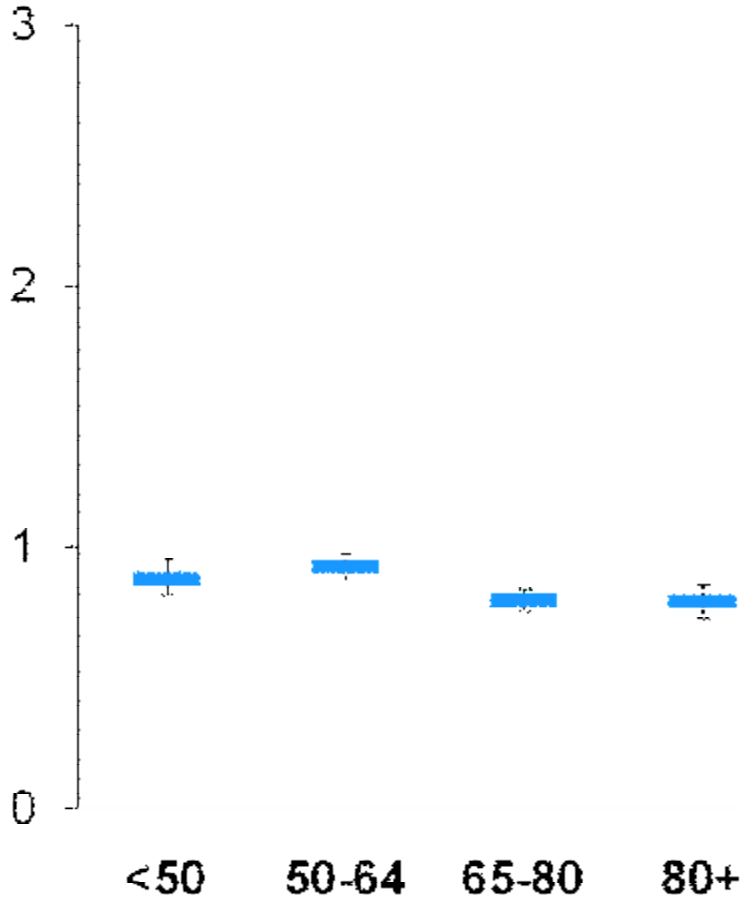


DOPPS 1 (1996-2001); DOPPS 2 (2002-2004); DOPPS 3 (2005-2008); DOPPS 4 (2009-2011)

Fistula and Graft Procedure Rates by Age

Phase 4 (2009-2011)

Rate/Patient-Year



Patient Age	Fistula	Graft
<50	53%	9%
50-64	55%	9%
65-79	54%	10%
80+	49%	8%

<50 50-64 65-80 80+

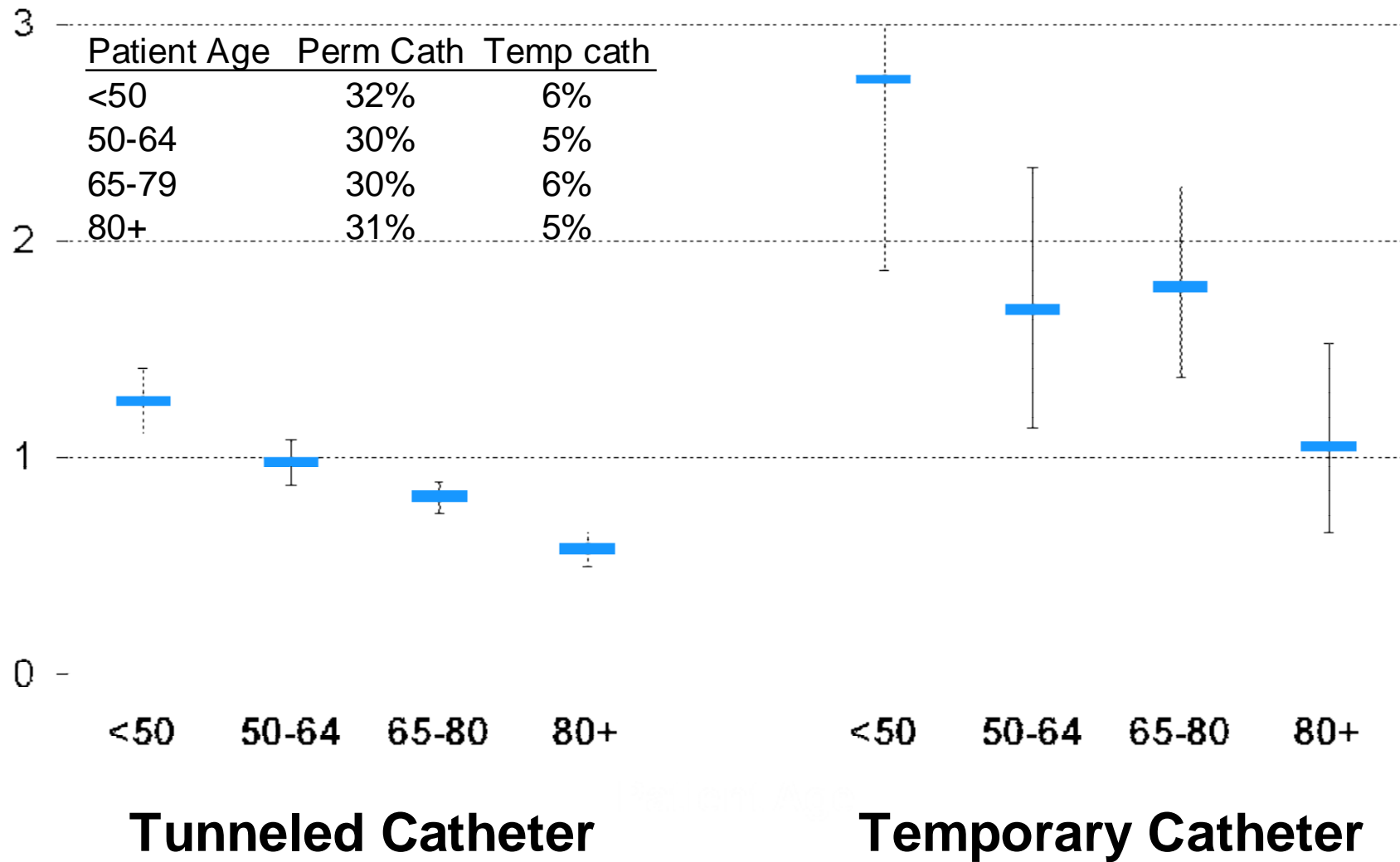
Fistula

Graft

Catheter Procedure Rates by Age

Phase 4 (2009-2011)

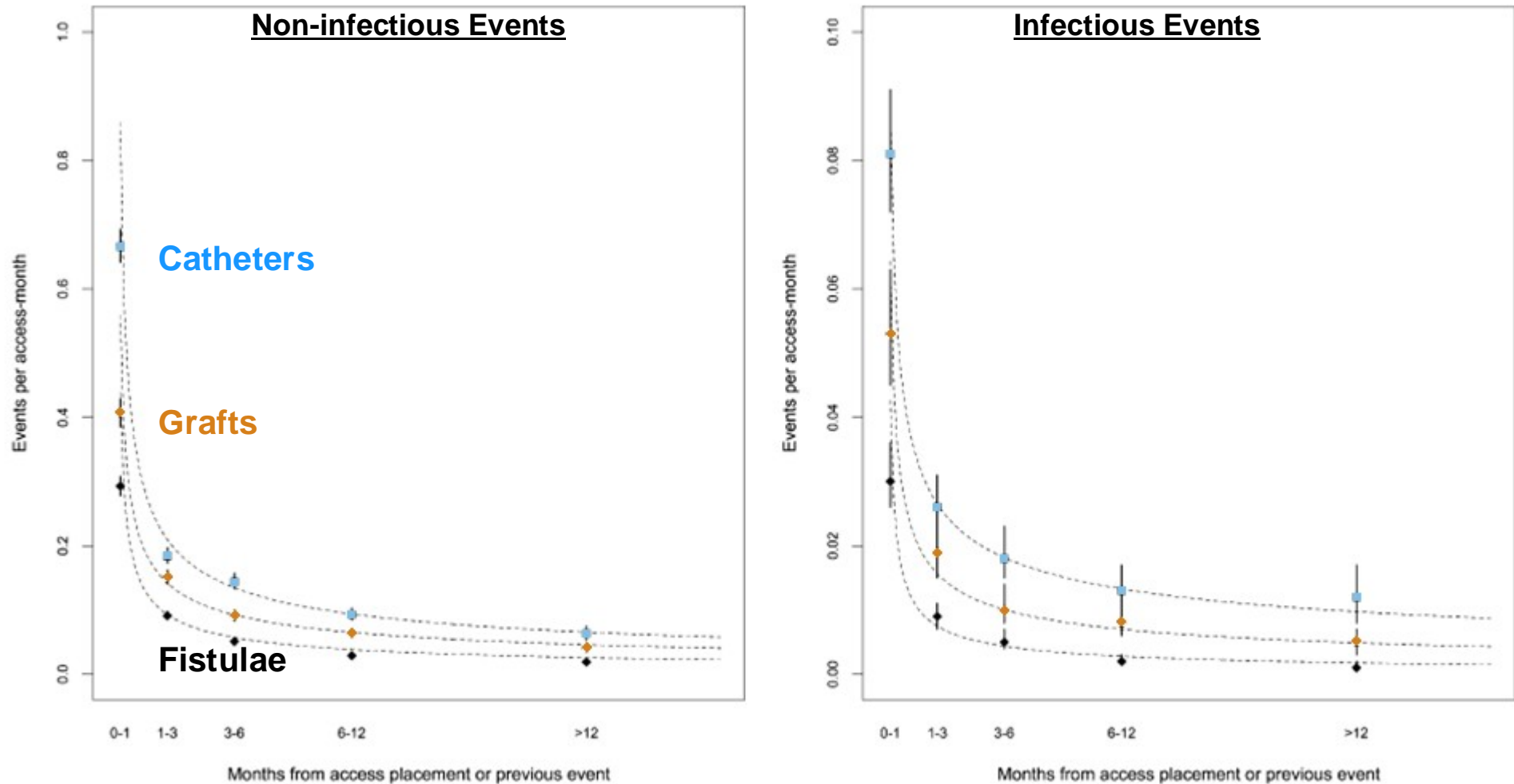
Rate/Patient-Year



Résumé

- FAV/prothèses : partout, fréquence des interventions X 2 à X 3 de 1996 à 2011
- Fréquence des interventions FAV < Prothèses (partout, et à tout âge)
- Impact de cette hausse des interventions sur la survie des abords reste à étudier dans DOPPS

Vascular Access: Procedure and Infection Risks



1996-2004. Adjusted for age, sex, smoking, 14 comorbid diseases

Implications ?

- Les premiers mois (3-6) de tout abord vasculaire sont critiques !
prévention et monitoring renforcés!!
 - suivi FAV avant début HD
 - Surveillance P et débit les premières semaines/mois d'HD
- Essais cliniques en matière d'abords vasc. devraient inclure préférentiellement ce type de pt (verrou, suivi P ou débit, médicament anticoagulant,....),
 - Plus grande puissance statistique qui réduit la taille de l'étude (coût,....)

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 - **Sanofi Renal** (since 2009)
 - **Baxter Healthcare** (since 2011)
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 - **Australia PDOPPS:** National Health and Medical Research Council of Australia
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