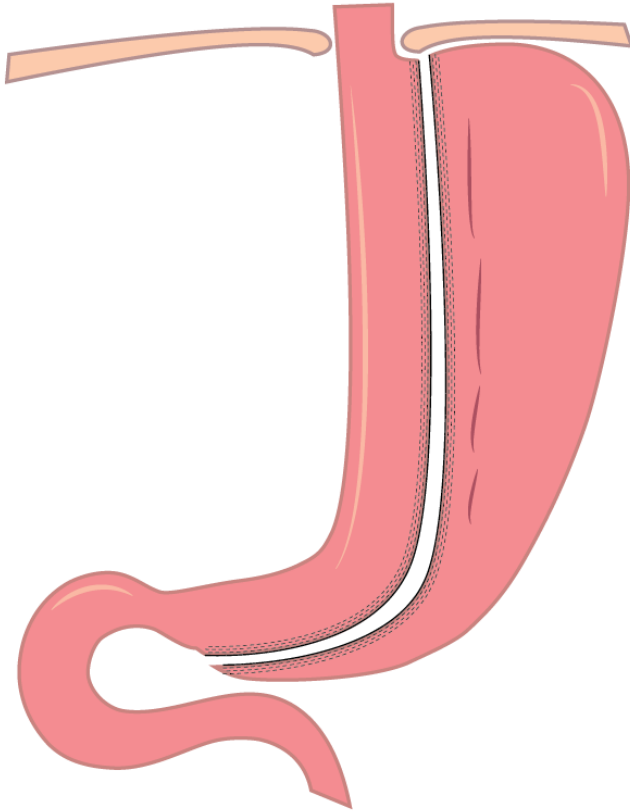


Surgical aspects of sleeve gastrectomy are related to total weight loss and gastro-esophageal reflux symptoms at two years postoperatively

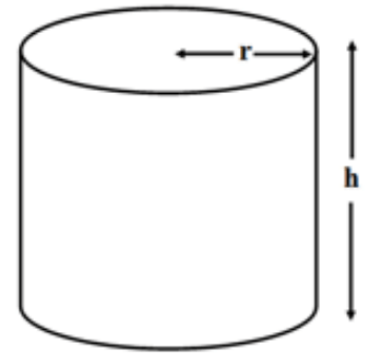
Hannu Lyyjynen

Co-authors: Magnus Sundbom, Anders Thorell, Erman Akpinar, Ronald Liem, Simon W. Nienhuijs, Tom Mala, John Roger Andersen, Villy Våge

Geometry: Cylinder?



$$V = \pi r^2 h$$



Method

- Total weight loss: $\%TWL = \frac{W_0 - W_2}{W_0}$
- Neo-reflux: No use of PPI preoperatively, use at 2 yrs
- TWL & neo-reflux vs.
 - Distance from pylorus (≤ 6 cm)
 - Bougie size (28-40 Fr)
 - Distance from His' angle (≤ 3 cm, N+S)

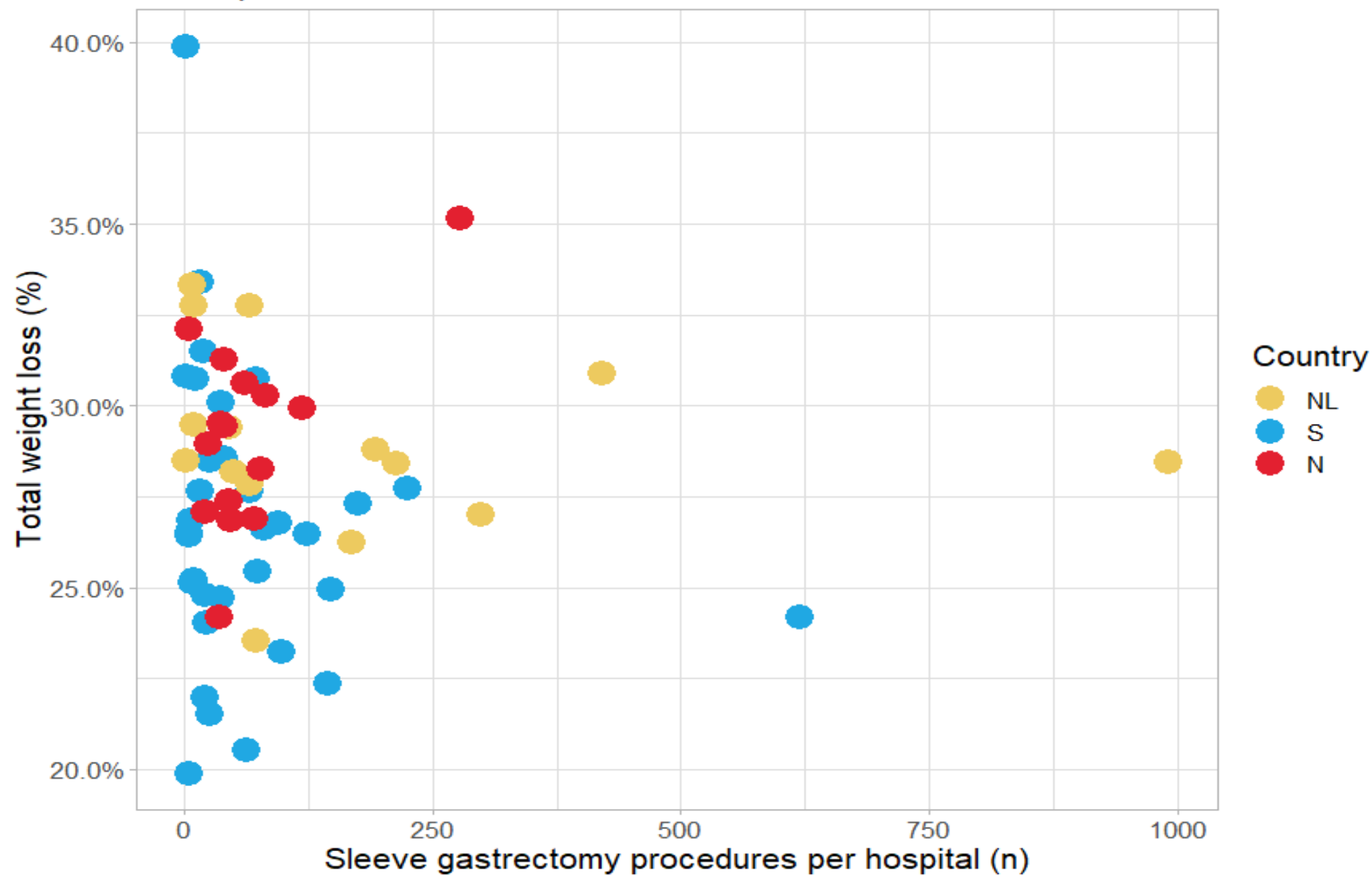
The study cohort

Year of operation	SOReg-N	SOReg-S	DATO	
2015	118	604	706	1428
2016	414	775	808	1997
2017	444	964	1094	2502
	976	2343	2608	5927

Two-year follow-up within 21 – 27 months (640-820 days)

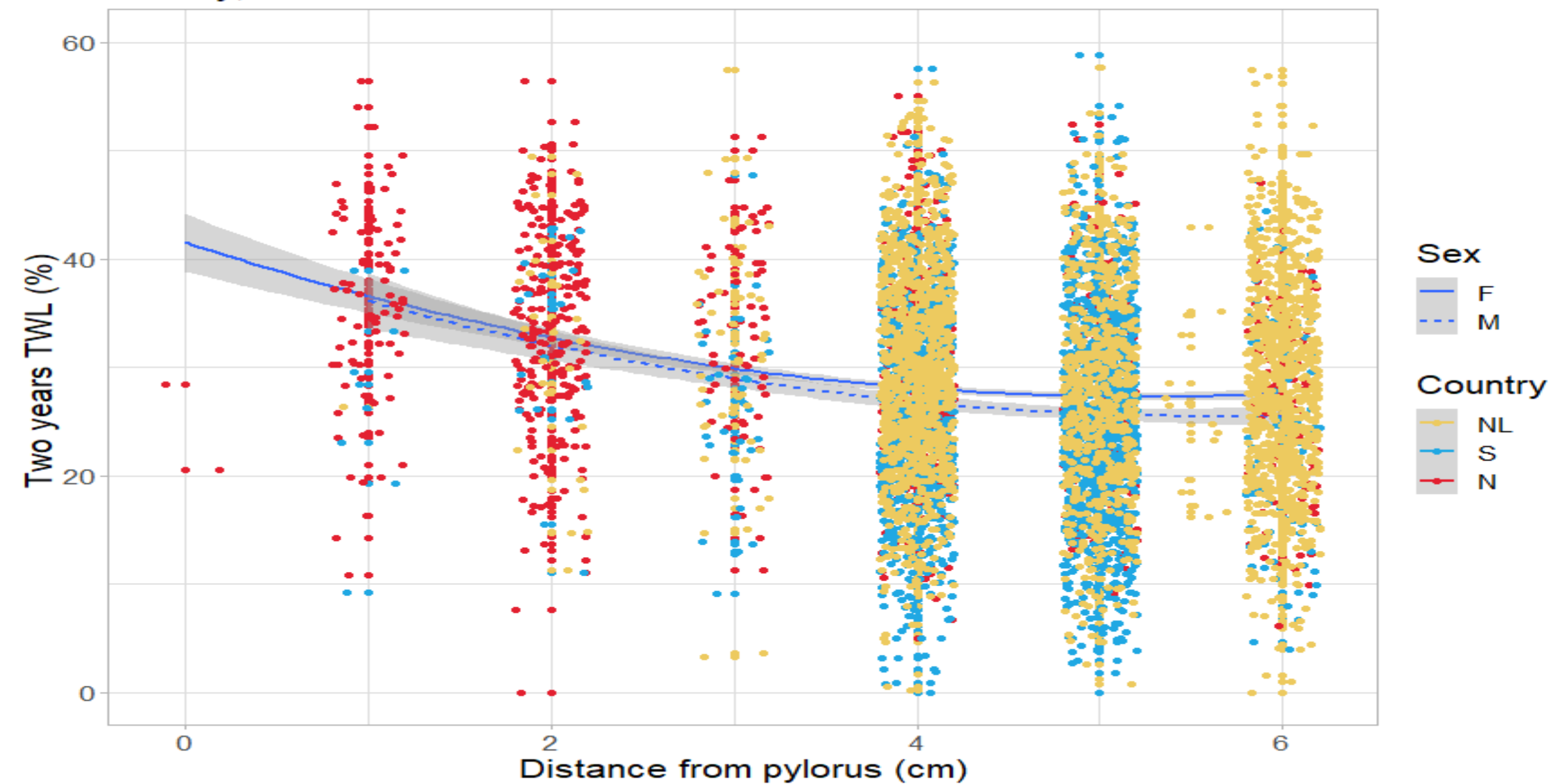
Sleeve gastrectomy, total weight loss

64 hospitals



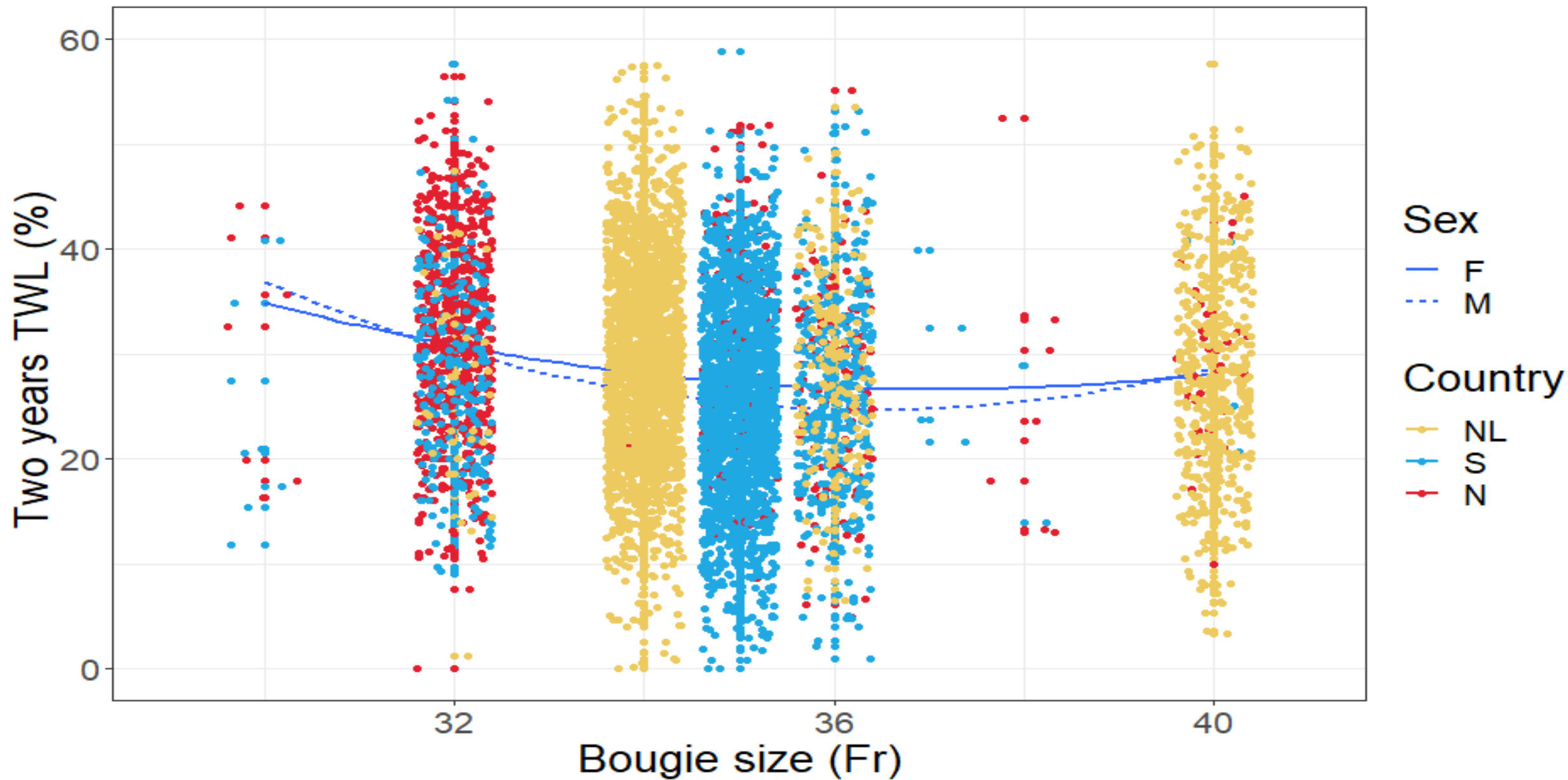
TWL vs. distance from pylorus

Norway, Sweden and the Netherlands

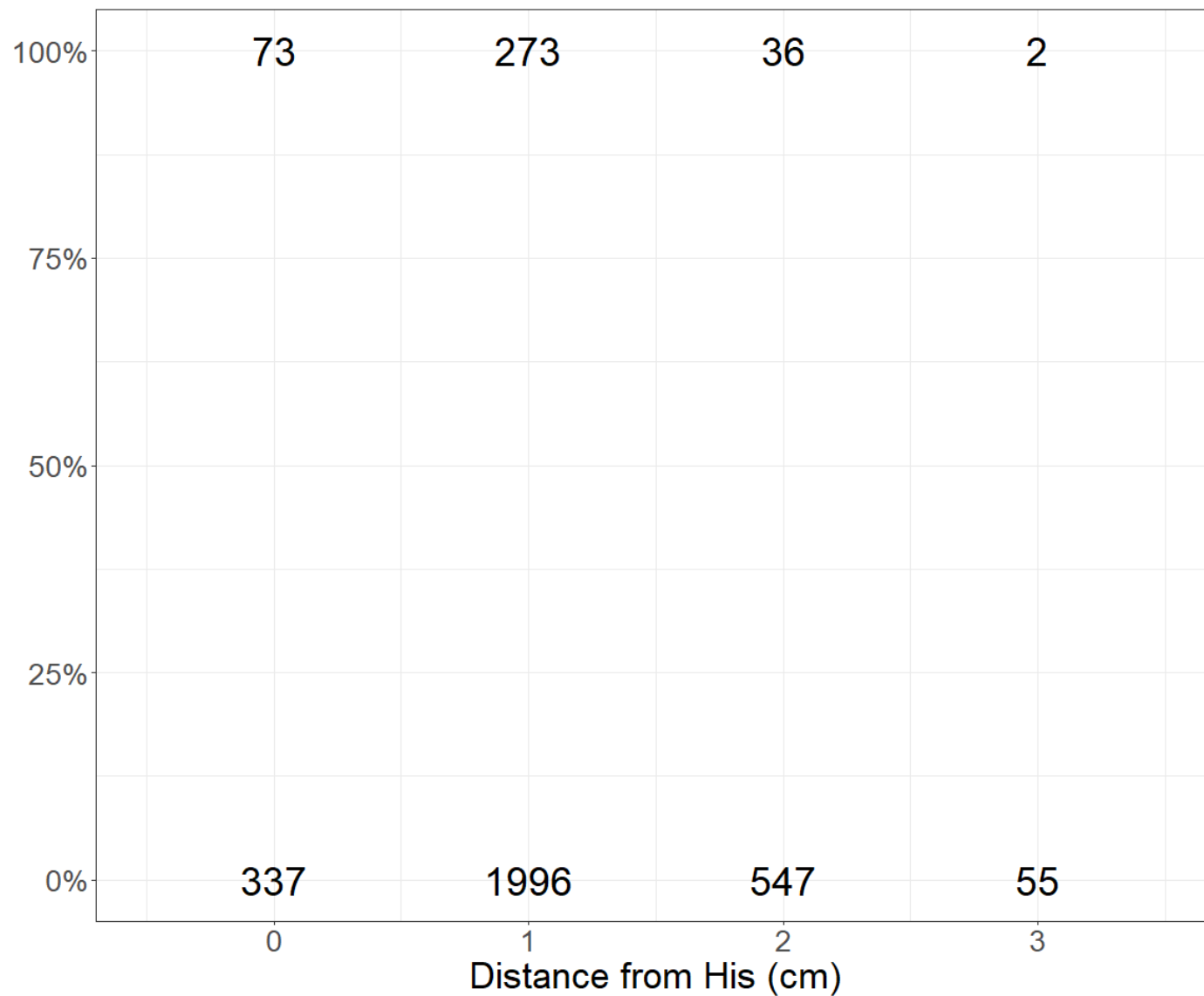


TWL vs. bougie size

Norway, Sweden and the Netherlands



Probability of Neo-Reflux (n = 3319)

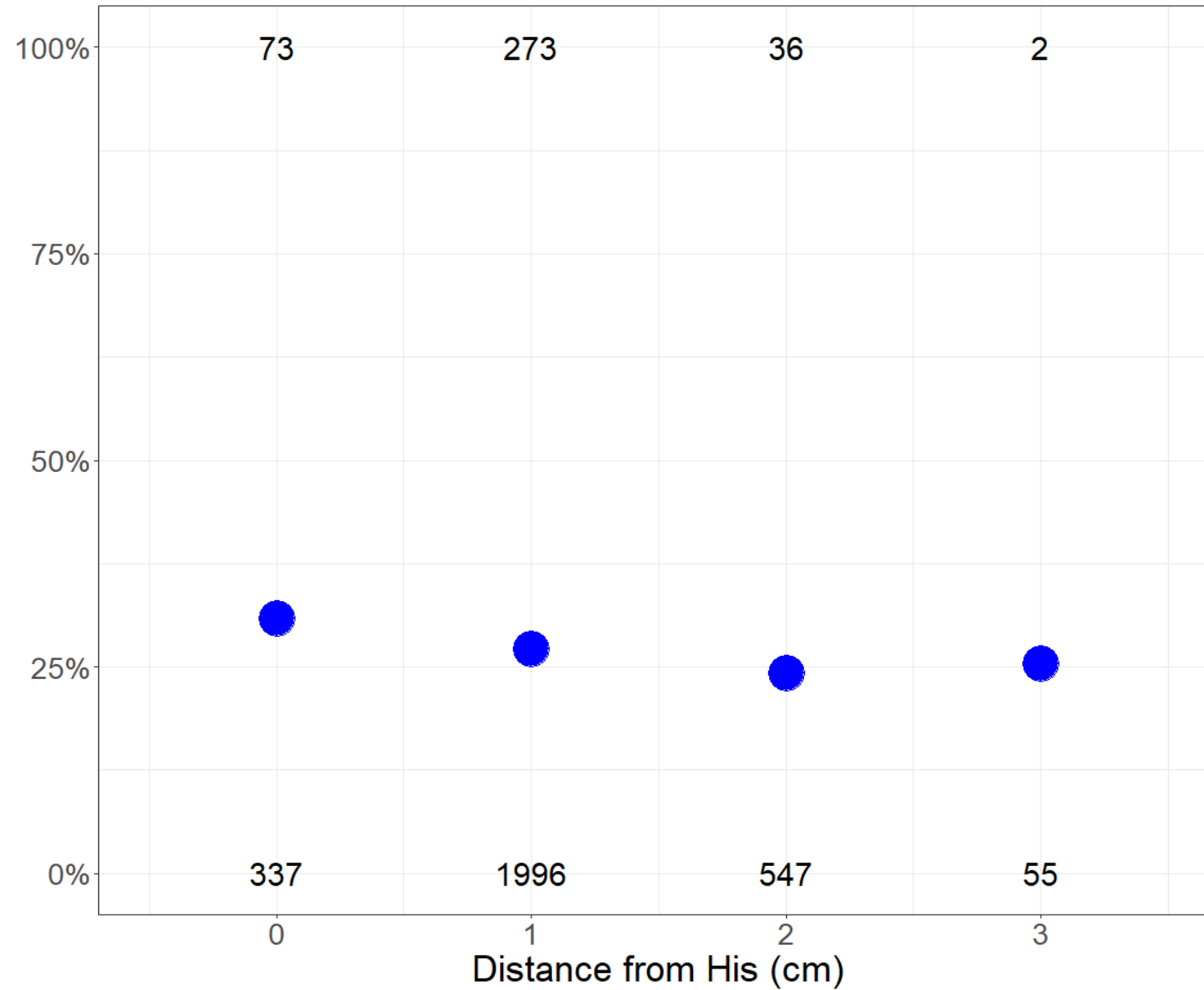


Neo-reflux (12%)

No neo-reflux (88%)

Probability of Neo-Reflux (n = 3319)

%TWL

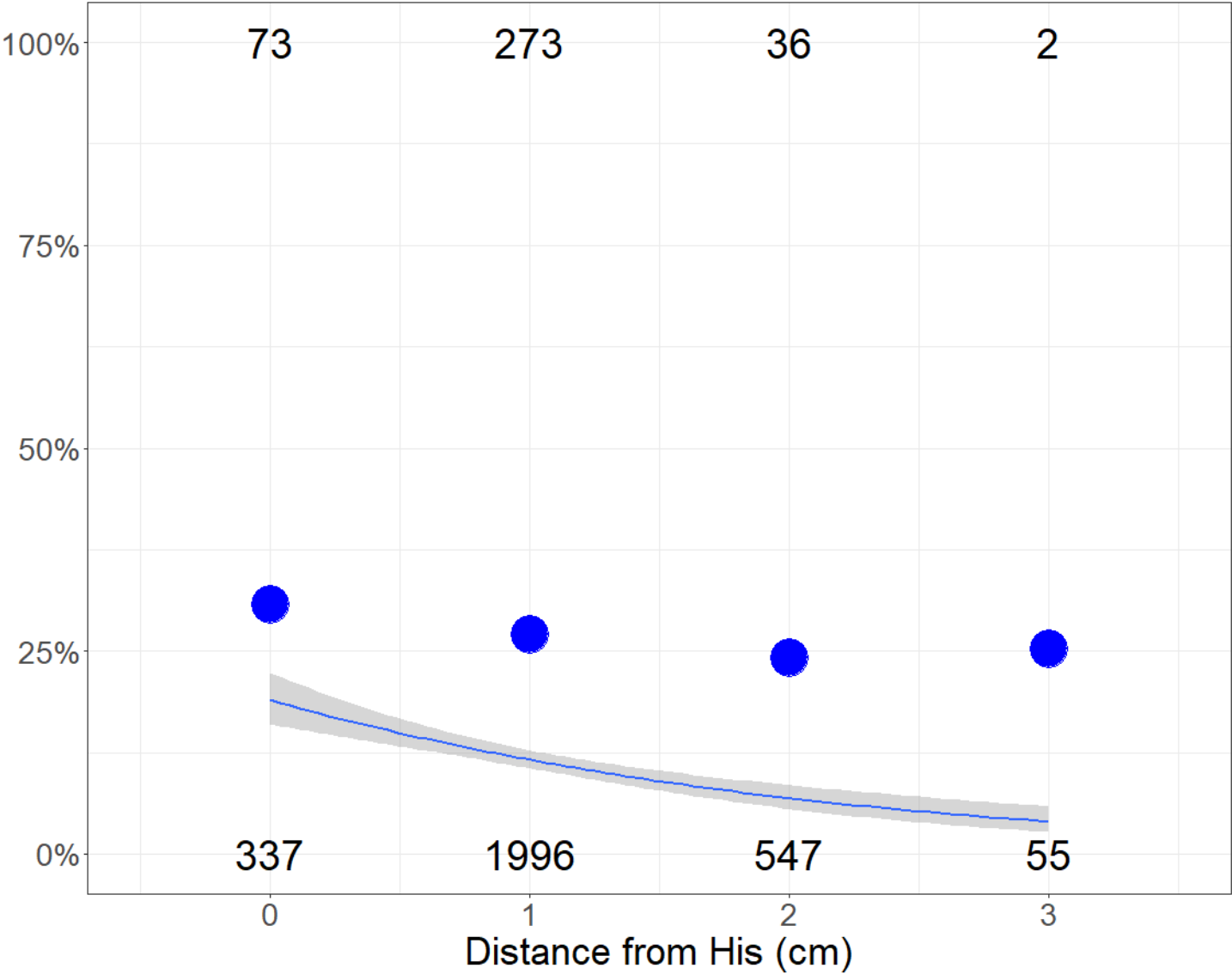


Neo-reflux (12%)

No neo-reflux (88%)

Probability of Neo-Reflux (n = 3319)

%TWL



Neo-reflux (12%)

No neo-reflux (88%)

Konklusjoner

- Stor variasjon i kirurgiske teknikker og vekttap mellom land og sykehus
- Dess mindre noen av målene:
 - Avstand til pylorus
 - Bougiestørrelse
 - Avstand til His' vinkel

dess bedre forventet vekttap

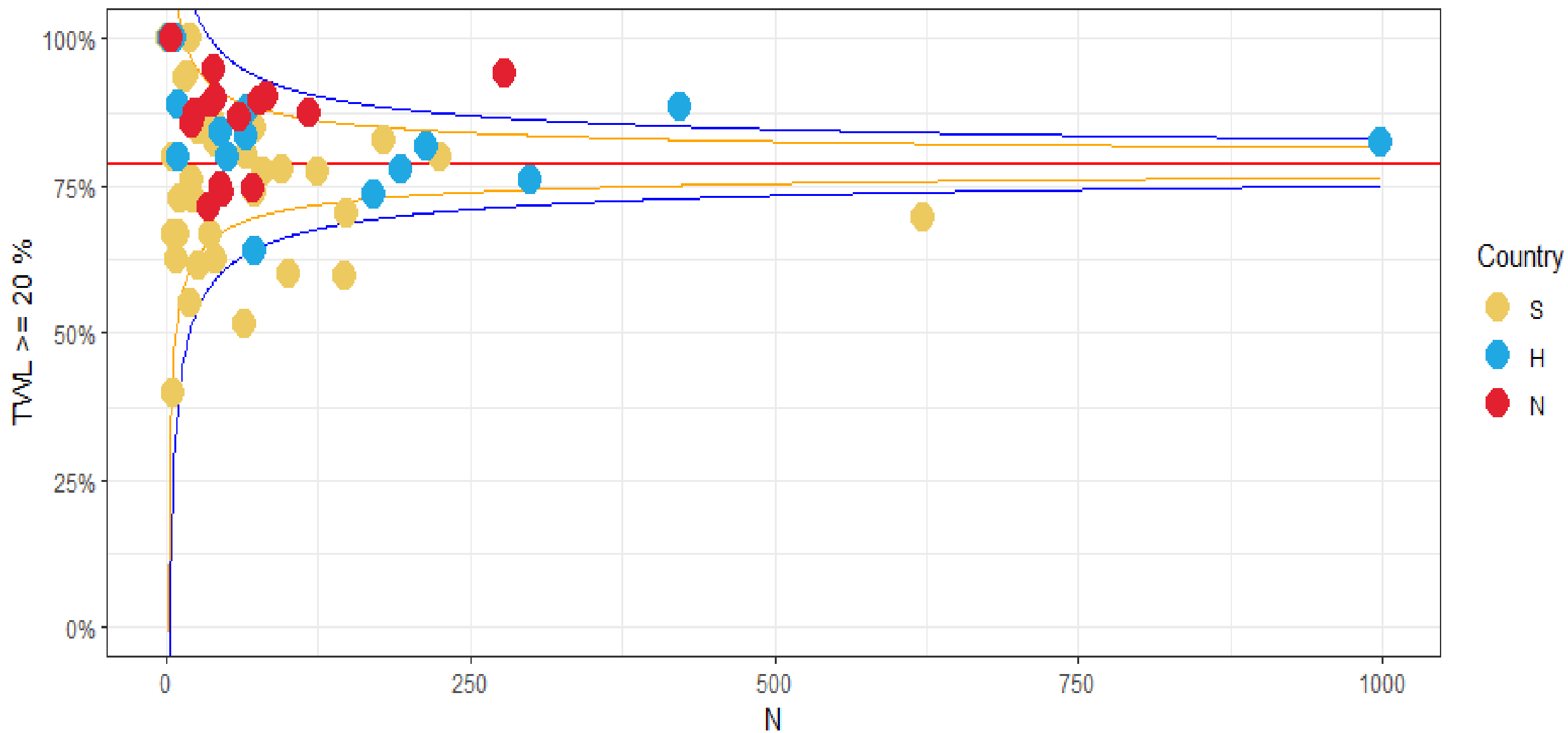
- **Men:** Mindre avstand til His' medfører også høyere risiko for neo-reflux

Conclusions

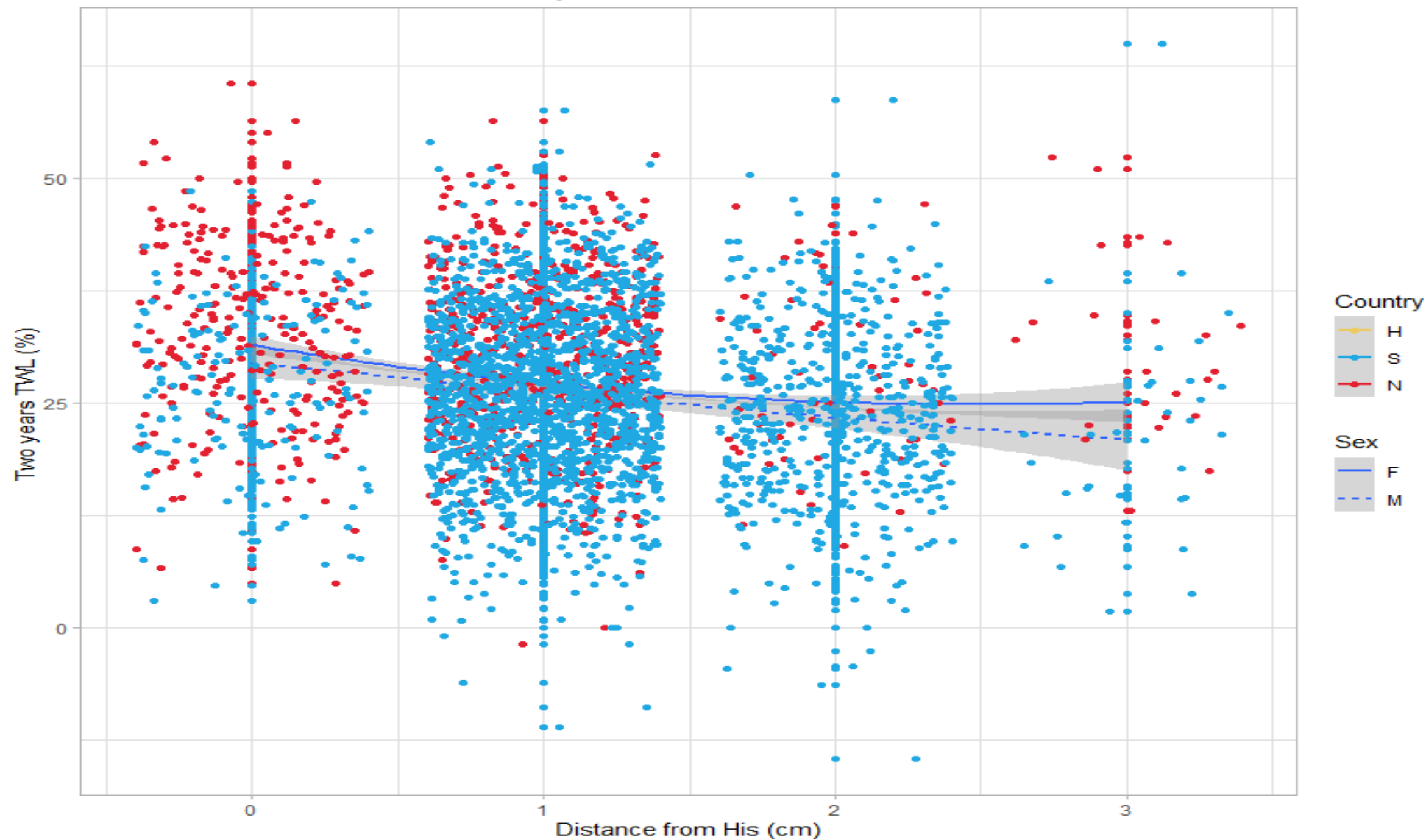
- Large variations in surgical technique and weight loss between the institutions and countries
- The smaller any measure:
 - Distance to pylorus
 - Bougie size
 - Distance to His'the better expected weight loss
- **But:** Smaller distance to His' also associated with higher risk of neo-reflux

Gastric Sleeve

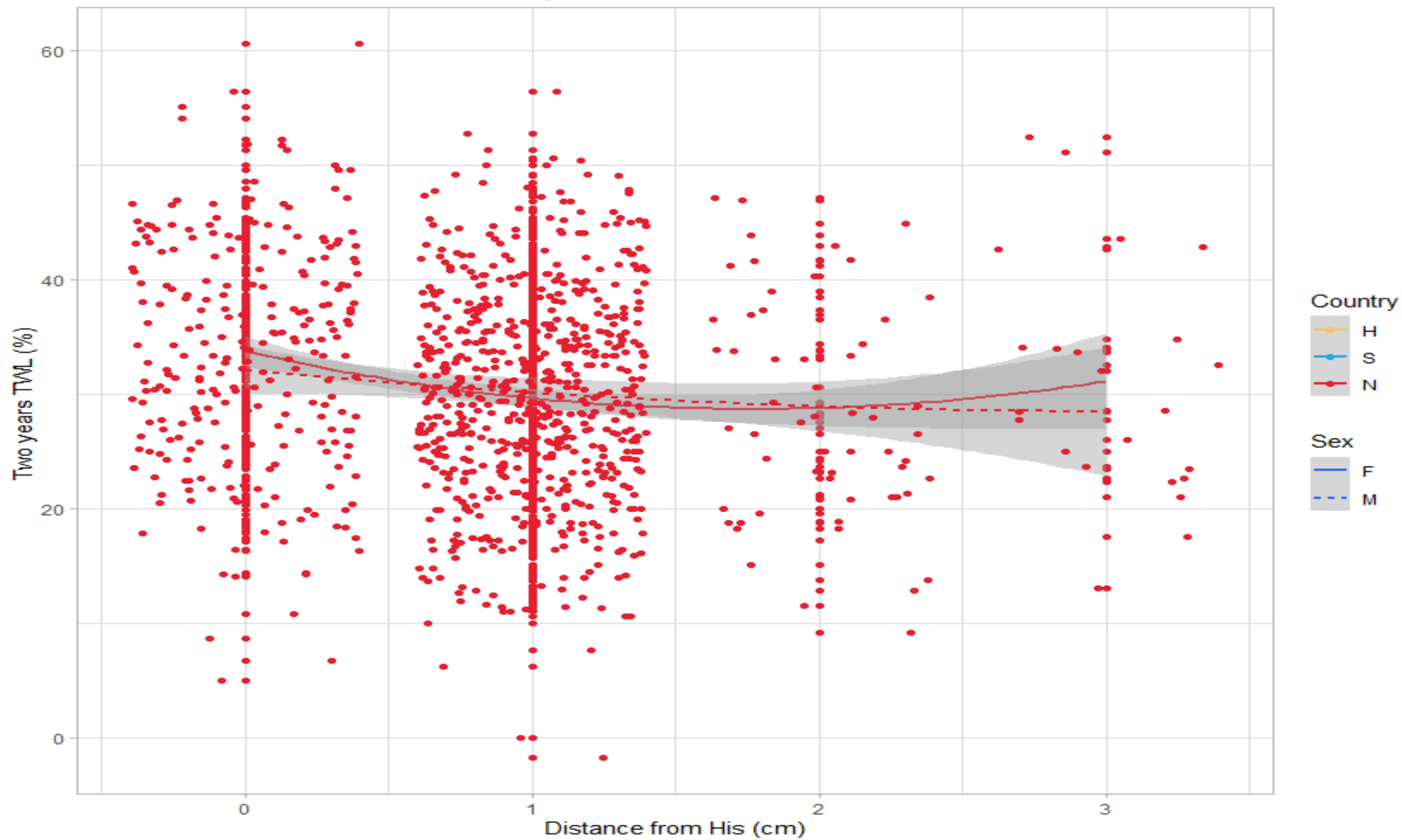
Percentage patients with TWL $\geq 20\%$ in 64 hospitals.

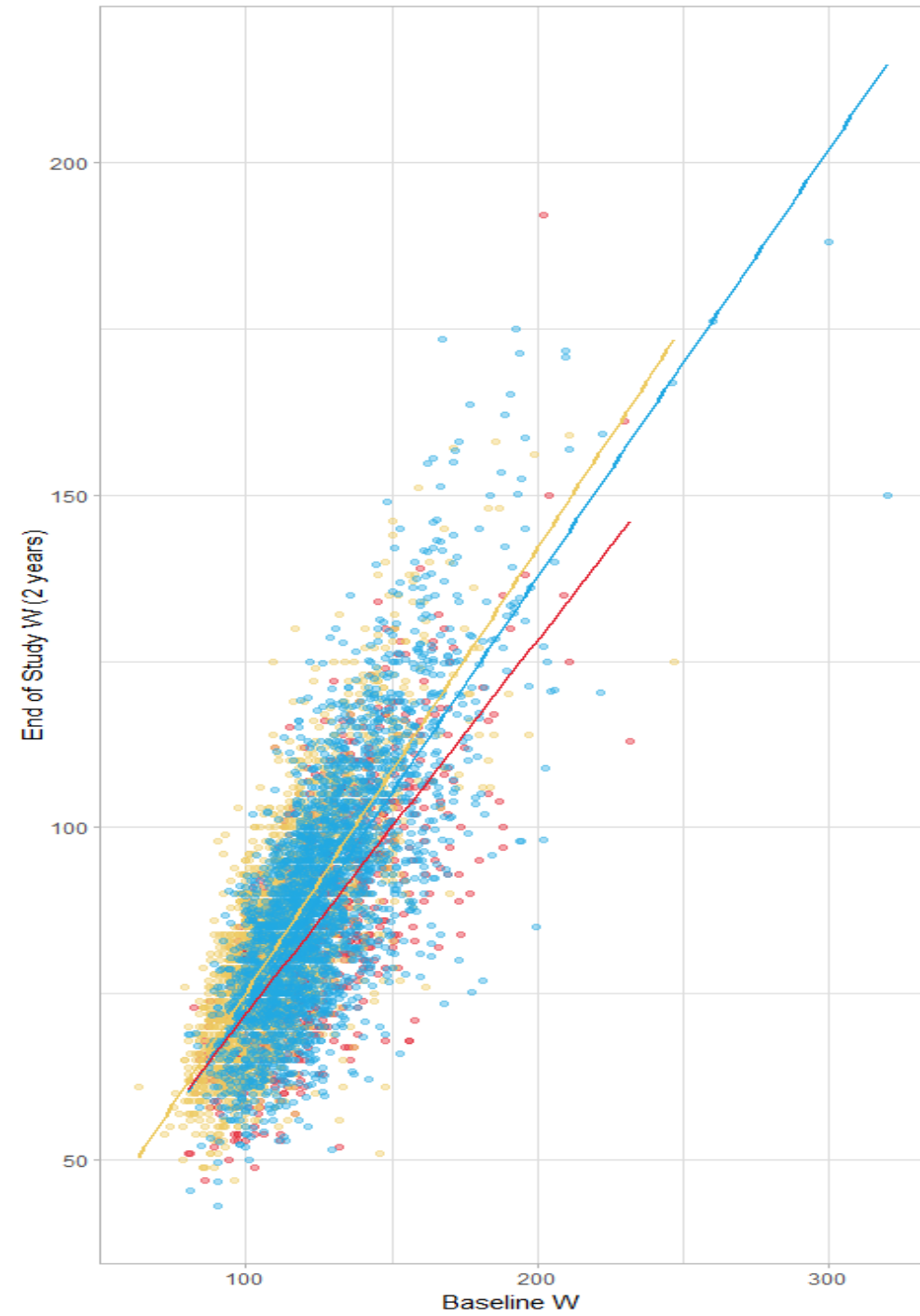


TWL vs. distance from His, Norway and Sweden



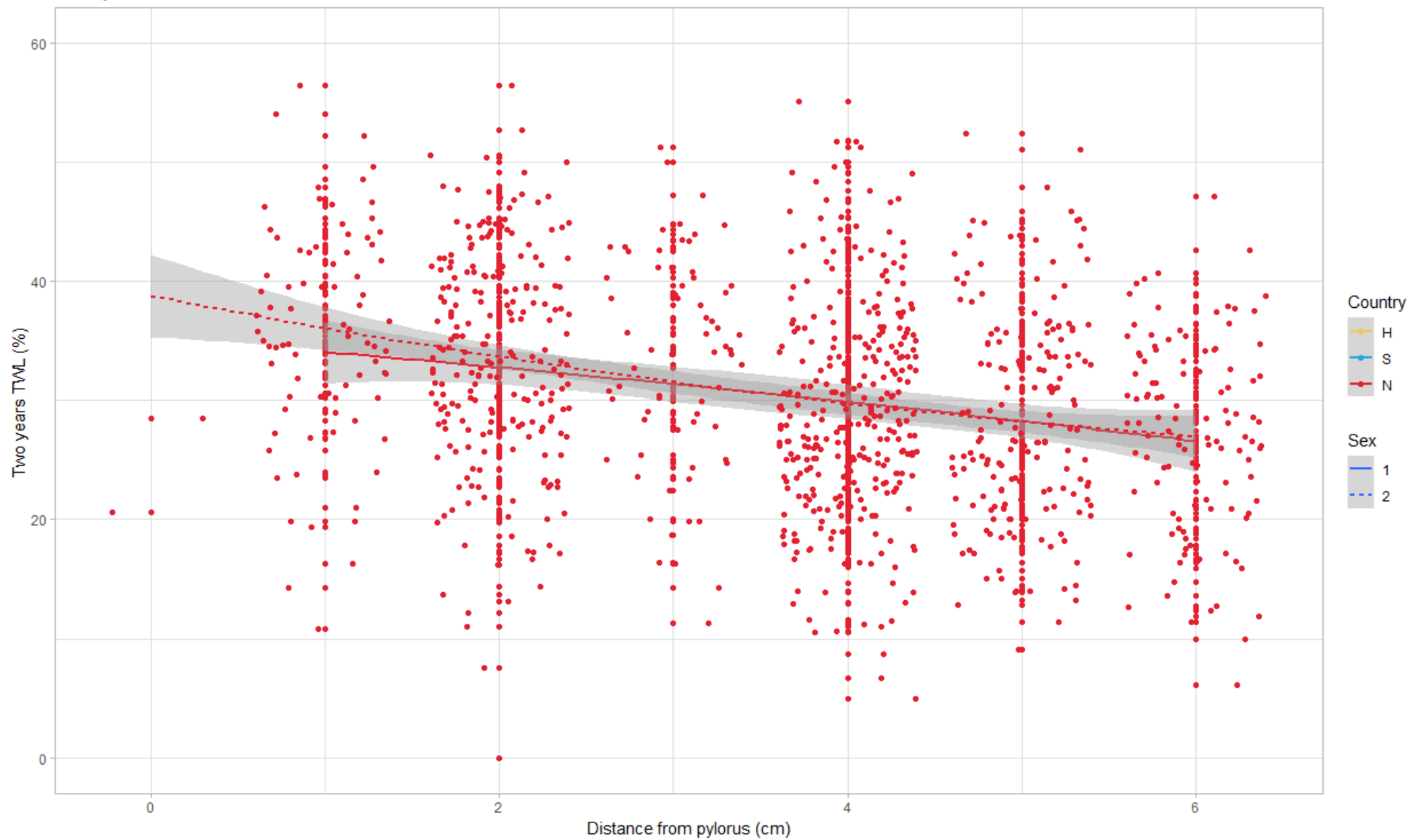
TWL vs. distance from His, Norway





TWL vs. distance from pylorus

Norway



Two year weight change vs. bougie size
Norway, Sweden and the Netherlands

