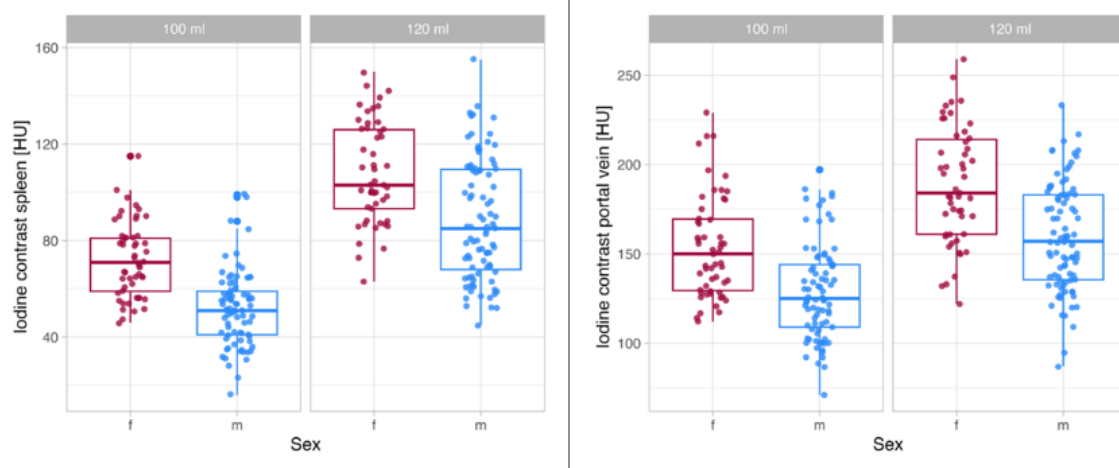


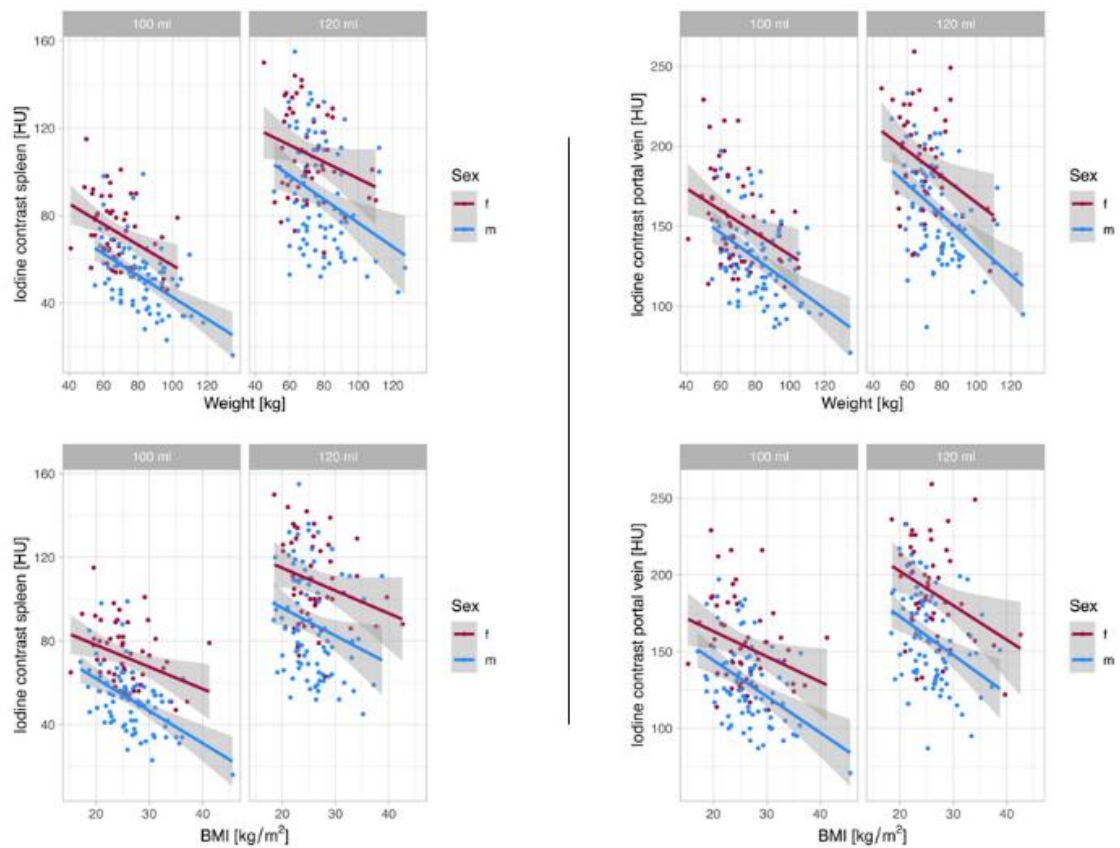
Are we systematically overdosing women? Revisiting standardized contrast protocols for thoracoabdominal CT scans

ELECTRONIC SUPPLEMENTARY MATERIAL

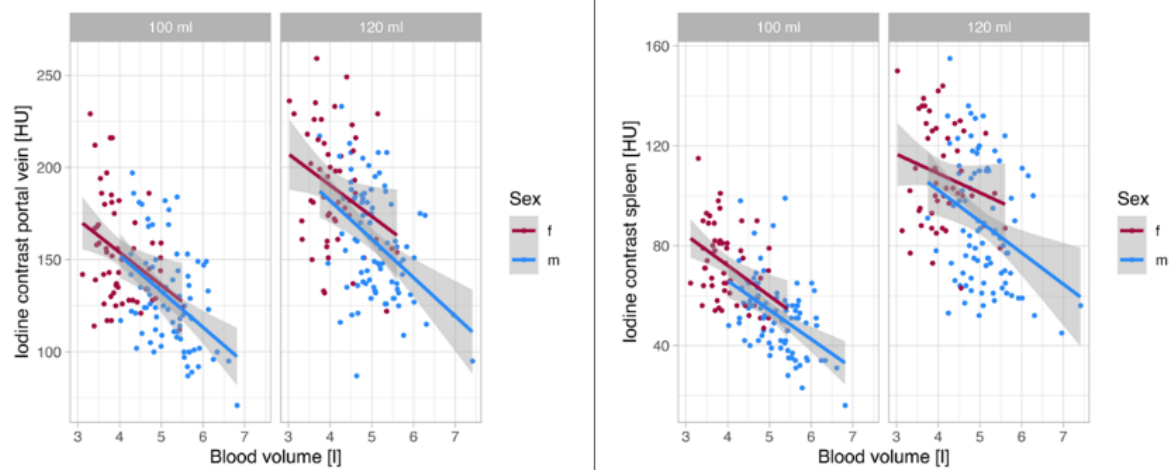
Suppl. Figure 3.1 The boxplots demonstrate the achieved iodine contrast (HU) in spleen and portal vein separated by sex, showing an observable difference between men and women.



Suppl. Figure 4.1 demonstrates the achieved iodine contrast values (HU) in the spleen and portal vein with linear regression lines for each sex corrected for body weight and BM.



Suppl. Figure 5.1 demonstrates the achieved iodine contrast values (HU) in the spleen and portal vein with linear regression lines for each sex corrected for blood volume.



Suppl. Tables:

Table 3.1 Influence of different variables on the achieved iodine contrast in the hepatic parenchyma				
	Univariable model		Multivariable model	
	Estimate (95% CI)	p-value	Estimate (95% CI)	p-value
Age [years]	0.14 (-0.03 – 0.30)	0.10	0.07 (-0.08 – 0.21)	0.35
BMI [kg/m ²]	-1.17 (-1.55 – -0.79)	< 0.001	-	-
Weight [kg]	-0.49 (-0.60 – -0.38)	< 0.001	-0.42 (-0.54 – -0.30)	< 0.001
Height [cm]	-0.56 (-0.76 – -0.35)	< 0.001	0.08 (-0.18 – 0.34)	0.54
Sex (m, baseline: f)	-12.21 (-15.92 – -8.50)	< 0.001	-9.03 (-13.41 – -4.64)	< 0.001
Blood volume [l]	-10.19 (-12.32 – -8.06)	< 0.001	-	-
CM volume [ml] (120 ml, baseline: 100 ml)	16.13 (12.25 – 20.00)	< 0.001	15.85 (12.50 – 19.19)	< 0.001

Table 3.2 Influence of different variables on the achieved iodine contrast in the spleen				
	Univariable model		Multivariable model	
	Estimate (95% CI)	p-value	Estimate (95% CI)	p-value
Age [years]	0.31 (0.09 – 0.53)	0.006	0.21 (0.02 – 0.40)	0.031
BMI [kg/m ²]	-1.29 (-1.83 – -0.76)	< 0.001	-	-
Weight [kg]	-0.64 (-0.79 – -0.48)	< 0.001	-0.47 (-0.63 – -0.31)	< 0.001
Height [cm]	-0.88 (-1.16 – 0.60)	< 0.001	0.06 (-0.28 – 0.40)	0.74
Sex [m, baseline: f]	-19.93 (-24.83 – -15.03)	< 0.001	-15.49 (-21.37 – -9.61)	< 0.001
Blood volume [l]	-14.40 (-17.25 – -11.54)	< 0.001	-	-
CM volume [ml] (120 ml, baseline: 100 ml)	35.76 (30.48 – 41.04)	< 0.001	35.37 (30.91 – 39.82)	< 0.001

Table 3.3 Influence of different variables on the achieved iodine contrast in the portal vein				
	Univariable model		Multivariable model	
	Estimate (95% CI)	p-value	Estimate (95% CI)	p-value
Age [years]	0.58 (0.26 – 0.89)	< 0.001	0.43 (0.16 – 0.71)	0.002
BMI [kg/m ²]	-2.17 (-2.93 – -1.41)	< 0.001	-	-
Weight [kg]	-1.00 (-1.21 – -0.78)	< 0.001	-0.78 (-1.01 – -0.55)	< 0.001
Height [cm]	-1.28 (-1.68 – -0.88)	< 0.001	0.10 (-0.38 – 0.59)	0.68
Sex (m, baseline: f)	-27.01 (-34.16 – -19.85)	< 0.001	-20.04 (-28.32 – -11.76)	< 0.001
Blood volume [l]	-21.59 (-25.67 – -17.51)	< 0.001	-	-
CM volume [ml] (120 ml, baseline: 100 ml)	31.02 (23.39 – 38.64)	< 0.001	29.94 (23.61 – 36.27)	< 0.001

Table 4.1 Linear model for the iodine contrast in the hepatic parenchyma	
Linear model with sex, CM and	p-value (sex m, baseline: f)
Blood volume [l]	0.35
Body weight [kg]	<0.001
Body height [cm]	<0.001
BMI [kg/m ²]	<0.001

Table 4.2 Linear model for the iodine contrast in the spleen	
Linear model with sex, CM and	p-value (sex m, baseline: f)
Blood volume [l]	0.019
Body weight [kg]	<0.001
Body height [cm]	<0.001
BMI [kg/m ²]	<0.001

Table 4.3 Linear model for the iodine contrast in the portal vein	
Linear model with sex, CM and	p-value (sex m, baseline: f)
Blood volume [l]	0.15
Body weight [kg]	<0.001
Body height [cm]	<0.001
BMI [kg/m ²]	<0.001