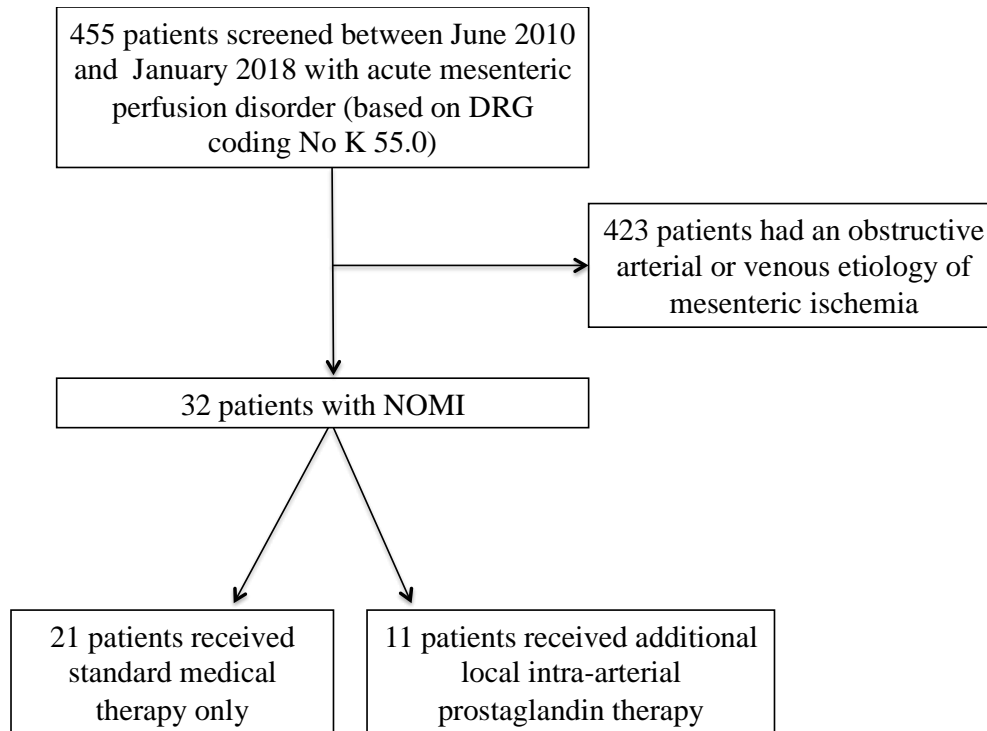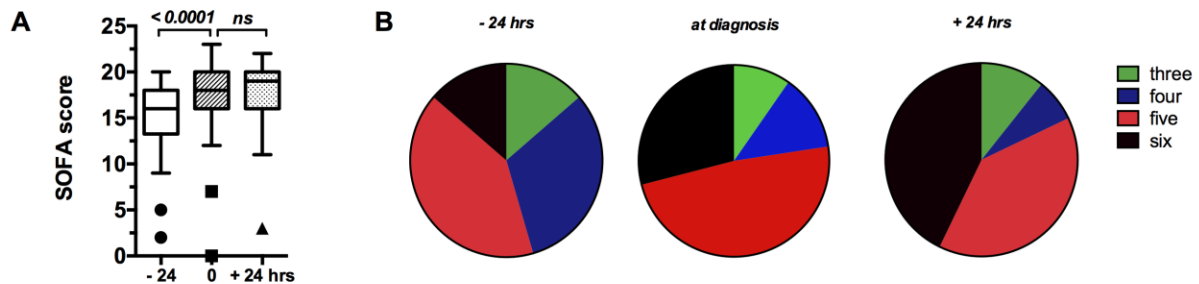# Supplemental Material

Suppl. FIGURE 1 – Flow chart of study participants. Flow chart demonstrates inclusion of patients into the retrospective analysis.

Suppl. FIGURE 2 – Organ failure and multiple organ failure at various time points in relation to NOMI diagnosis. Box and whisker blots showing the SOFA Score 24hrs before (-24), at the time (0) and 24hrs after diagnosis of NOMI (+24 hrs) **(A)**. SOFA score significantly increased in the 24hrs before diagnosis of NOMI (p<0.0001). The fraction of higher grade multi-organ failure progressively developed in the further course **(B)**

Suppl. TABLE 1 – CT-A characteristics of patients at diagnosis. Displayed are diverse imaging characteristics that support a diagnosis of NOMI in a patient with clinical suspicion of NOMI. Values are displayed as numbers (percentage) or means ± standard deviation.

Suppl. Table 1: CT-A characteristics of patients at diagnosis (n=30)

	Category	no (%) / Mean ± SD
Semiquantitative mesenteric vessel width	mesenteric arterial	
	1	9 (30)
	2	21 (70)
(1=barely definable-,	3	0 (0)
2=narrow-, 3=regular-,	4	0 (0)
4=dilated vessel diameter)	mesenteric venous	
	1	7 (23.3)
	2	19 (63.3)
	3	4 (13.4)
	4	0 (0)
Semiquantitative mesenteric vessel contrast	mesenteric arterial	
	1	17 (56.6)
	2	11 (36.7)
(1=strongly-, 2=moderatly-,	3	2 (6.7)
3=barely visible contrast)	mesenteric venous	
	1	15 (50)
	2	11 (36.7)
	3	4 (13.3)
Quantitative mesenteric vessel diameter (mm)	proximal SMA (1cm distal of origin)	5.5 ± 1.5
	middle SMA (after origin of first segmental branch)	4.2 ± 1
	distal SMA (proximal ileocolic area)	1.9 ± 0.6
	SMV (1cm proximal to the portal vein)	9.7 ± 2.6
Secondary signs	Pneumatosis intestinalis	4 (13.3)
	Portal venous gas	3 (10)
	Bowel wall edema	26 (86.7)
	Bowel wall thickening	18 (60)
	Bowel wall hypoenhancement	25 (83.3)
	Bowel loop distention	12 (40)
	Mesenteric edema	25 (83.3)
Additional vessel sclerosis SMA		3 (10)

Suppl. TABLE 2 – Angiography characteristics of patients before and after initial prostaglandin bolus. Displayed are diverse imaging characteristics on initial angiography and following the first bolus infusion of 20ug of alprostadil. Values are displayed as numbers (percentage).

Suppl. Table 2: Angiography characteristics of patients before and after initial prostaglandin bolus (n=9)

	before prostaglandin bolus		*after* prostaglandin bolus	
	Category	no (%)	Category	no (%)
Mesenteric vessel morphology (0-4)	0	0 (0)	0	3 (33.3)
	1	1 (11.1)	1	6 (66.7)
	2	7 (77.8)	2	0 (0)
	3	1 (11.1)	3	0 (0)
	4	0 (0)	4	0 (0)
Contrast medium reflux into the aorta (0-2)	0	6 (66.7)	0	9 (100)
	1	3 (33.3)	1	0 (0)
	2	0 (0)	2	0 (0)

Mesenteric vessel morphology:

0 SMA trunk, branches and mesenteric arcades normal
1 SMA trunk normal, several SMA branches and/or mesenteric arcades slightly constricted
   SMA trunk slightly constricted, normal SMA branches and mesenteric arcades
   SMA trunk, several SMA branches and/or mesenteric arcades slightly constricted
2 SMA trunk partly, multiple SMA branches and/or mesenteric arcades constricted
3 SMA trunk normal, multiple SMA branches and/or mesenteric arcades completely constricted and partly not visible

Contrast medium reflux into the aorta:

0 No contrast medium reflux into the aorta
1 Some contrast medium reflux into the aorta
2 Severe contrast medium reflux with complete aortogram

ABBREVIATIONS for Supplemental Material:

DRG – Diagnosis related groups, NOMI – non-occlusive mesenteric ischemia, SOFA - Sequential Organ Failure Assessment, NE dose – norepinephrine dose, CK – creatine kinase, LDH – Lactate dehydrogenase, AST – Aspartate aminotransferase, ALT – Alanine

aminotransferase, INR – international normalized ratio, CT-A – Computed tomography angiography, SD – standard deviation