

**Table 1. Patient characteristics**

Patient characteristics	All women N = 45	Budd-Chiari syndrome <sup>1</sup> N = 12	Portal vein thrombosis N = 33
Age at diagnosis (years), mean ± SD	24 ± 7	23 ± 5	25 ± 8
Age at first conception (years), mean ± SD	31 ± 5	31 ± 5	31 ± 5
BMI at first conception (kg/m <sup>2</sup> ), mean ± SD	24.9 ± 4.1	25.0 ± 3.2	24.8 ± 4.4
<i>Ethnicity, n (%)</i>			
African (Sub-Sahara)	2 (4)	1 (8)	1 (3)
Asian	1 (2)	1 (8)	0
Caribbean	2 (4)	1 (8)	1 (3)
Caucasian	30 (67)	5 (42)	25 (76)
Middle-Eastern/North-African	5 (11)	2 (17)	3 (9)
<i>Aetiology of thrombosis, n (%)</i>			
Antiphospholipid syndrome	4 (9)	2 (17)	2 (6)
Inherited thrombophilia	9 (20)	2 (17)	7 (21)
Myeloproliferative neoplasm	7 (16)	1 (8)	6 (18)
Oral contraceptive use	17 (38)	7 (58)	10 (30)
Inflammatory bowel disease	5 (11)	2 (17)	3 (9)
Other <sup>2</sup>	15 (33)	0	15 (44)
<i>Characteristics at diagnosis, n (%)</i>			
Oesophageal varices <sup>3</sup>	14 (31)	0	14 (42)
Hepatomegaly	9 (20)	7 (58)	2 (6)
Intrahepatic or portosystemic collaterals	18 (40)	6 (50)	12 (36)
Portal hypertension <sup>3</sup>	38 (84)	12 (100)	26 (79)
Splenomegaly	19 (42)	1 (8)	18 (55)
<i>Treatment prior to pregnancy, n (%)</i>			
Angioplasty hepatic vein	1 (2)	1 (8)	0
Endoscopic variceal ligation	9 (20)	0	9 (27)
Portosystemic shunt (TIPS)	6 (13)	5 (42)	1 (3)
Stenting inferior vena cava	2 (4)	1 (8)	1 (3)
<i>History of pregnancy loss, n (%)</i>			
Early loss (<10 weeks GA)	6 (13)	0	6 (18)
Late loss (≥10 weeks GA)	2 (4)	0	2 (6)

Abbreviations: n, number; SD, standard deviation; BMI, body mass index; TIPS, transjugular intrahepatic portosystemic shunt; GA, gestational age.

<sup>1</sup> Five women were diagnosed with Budd-Chiari syndrome and portal vein thrombosis

<sup>2</sup> Other risk factors include hyperhomocysteinemia (N=1), hormonal therapy other than oral contraceptives (N=4), post-surgery (N=4), acute pancreatitis (N=2), malignancy (N=1), umbilical vein catheter (N=2), autoimmune hepatitis (N=1).

<sup>3</sup> In the portal vein thrombosis cohort, two women developed oesophageal varices prior to the first pregnancy.

Table 2. Maternal outcomes

Abbreviations: n, number

Outcomes	All women		Budd-Chiari syndrome		Portal vein thrombosis	
	<i>All pregnancies<sup>1</sup></i>	<i>First pregnancies<sup>1</sup></i>	<i>All pregnancies</i>	<i>First pregnancies</i>	<i>All pregnancies<sup>1</sup></i>	<i>First pregnancies<sup>1</sup></i>
	N = 75	N = 44	N = 19	N = 11	N = 56	N = 33
Maternal death, n (%)	0	0	0	0	0	0
Gestational course, n (%)						
Antepartum vaginal bleeding	1 (1)	1 (2)	1 (5)	1 (9)	0	0
Oesophageal varices in pregnancy	3 (4)	3 (7)	1 (5)	1 (9)	2 (4)	2 (6)
Placental abruption	4 (5)	1 (2)	2 (11)	1 (9)	2 (4)	0
Preeclampsia	7 (9)	4 (9)	2 (11)	1 (9)	6 (11)	4 (12)
Pregnancy-induced hypertension	1 (1)	0	0	0	1 (2)	0
Portal hypertension in pregnancy	1 (1)	1 (2)	1 (5)	1 (9)	0	0
Variceal bleeding <sup>2</sup>	2 (3)	2 (4)	0	0	2 (4)	2 (6)
Thrombotic events, n (%)						
Venous thrombosis	1 (1)	0	0	0	1 (2)	0
Arterial thrombosis	1 (1)	0	0	0	1 (2)	0

<sup>1</sup> One woman with portal vein thrombosis had a twin pregnancy (first pregnancy)

<sup>2</sup> One woman with portal vein thrombosis had a precautionary intervention, no active variceal bleeding.

Outcomes

All women

Budd-Chiari syndrome<sup>1</sup>

Portal vein thrombosis

	<i>All pregnancies</i>	<i>First pregnancies</i>	<i>All pregnancies</i>	<i>First pregnancies</i>	<i>All pregnancies</i>	<i>First pregnancies</i>
	<b>N = 76</b>	<b>N = 45</b>	<b>N = 19</b>	<b>N = 11</b>	<b>N = 57</b>	<b>N = 34</b>
<b>Pregnancy loss, n (%)</b>	22 (29)	11 (24)	8 (42)	5 (45)	14 (25)	6 (18)
Early pregnancy loss (GA <10 weeks)	15 (68)	6 (55)	6 (75)	3 (60)	9 (64)	3 (50)
Late pregnancy loss (GA 10-24 weeks)	7 (32)	5 (45)	2 (25)	2 (40)	5 (36)	3 (50)
<b>Neonatal outcomes, n (%)<sup>2</sup></b>						
<i>Live birth<sup>3</sup></i>	54 (71)	34 (76)	11 (58)	6 (55)	43 (75)	28 (82)
Gestational age ≥ 37 weeks (term live birth)	40 (77)	26 (79)	8 (73)	5 (83)	32 (78)	21 (78)
Gestational age 32-36 weeks	8 (15)	5 (15)	1 (9)	0	7 (17)	5 (18)
Gestational age 24-31 weeks	4 (8)	2 (6)	2 (18)	1 (17)	2 (5)	1 (4)
<i>Mortality</i>						
Perinatal mortality	0	0	0	0	0	0
Death >28 days	1 (2)	0	1 (9)	0	0	0
<i>Birth weight</i>						
SGA <10 <sup>th</sup> percentile	12 (22)	9 (26)	6 (55)	3 (50)	6 (14)	6 (21)
SGA <3 <sup>rd</sup> percentile	3 (6)	2 (6)	1 (9)	0	2 (5)	2 (7)
<i>Neonatal adverse events</i>						
Apgar <7 (5 minutes)	2 (4)	2 (6)	1 (9)	1 (17)	1 (2)	1 (4)
pH umbilical cord <7.21	4 (7)	2 (6)	2 (18)	1 (17)	2 (5)	1 (4)
Admission to NICU	8 (15)	5 (15)	3 (27)	1 (17)	5 (12)	4 (14)
IRDS	1 (2)	1 (15)	0	0	1 (2)	1 (4)

**Table 3. Foetal and neonatal outcomes**

Abbreviations: n, number; GA, gestational age; SGA, small for gestational age; NICU, neonatal intensive care unit; IRDS, infant respiratory distress syndrome.

<sup>1</sup> One ectopic pregnancy, excluded from analyses.

<sup>2</sup> Neonatal outcomes presented as proportion of the number of live births per cohort.

<sup>3</sup> Gestational age unknown for two second pregnancies and one first pregnancy in the portal vein thrombosis cohort.

**Table 4. Obstetrical outcomes**

Obstetrical outcomes	All women		Budd-Chiari Syndrome		Portal vein thrombosis	
	<i>All pregnancies</i>	<i>First pregnancies</i>	<i>All pregnancies</i>	<i>First pregnancies</i>	<i>All pregnancies.</i>	<i>First pregnancies</i>
	<b>N = 54</b>	<b>N = 34</b>	<b>N = 11</b>	<b>N = 6</b>	<b>N = 43</b>	<b>N = 28</b>
<i>Postpartum blood loss, n (%)</i>						
0-500 mL	22 (41)	13 (38)	2 (18)	1 (17)	20 (47)	12 (43)
500-1000 mL	10 (19)	6 (18)	1 (9)	0	9 (21)	6 (21)
>1000 mL	8 (15)	6 (18)	1 (9)	1 (17)	7 (16)	5 (18)
<i>Mode of delivery<sup>1</sup>, n (%)</i>						
Vaginal	25 (46)	17 (50)	8 (73)	4 (67)	17 (40)	13 (46)
Spontaneous onset of labour	15 (60)	16 (94)	7 (88)	3 (75)	8 (47)	13 (100)
Induction of labour	8 (32)	0	0	0	8 (47)	0
Vacuum extraction	2 (8)	1 (6)	1 (12)	1 (25)	1 (6)	0
Caesarean	22 (41)	14 (42)	1 (9)	1 (17)	21 (49)	13 (46)
Primary	18 (82)	11 (79)	0	0	18 (86)	11 (85)
Emergency	4 (18)	3 (21)	1 (100)	1 (100)	3 (14)	2 (15)
<i>Placental delivery, n (%)</i>						
Spontaneous	22 (41)	13 (38)	8 (73)	4 (67)	14 (33)	9 (32)
Manual	2 (4)	2 (6)	0	0	2 (5)	2 (7)

Abbreviations: n, number; mL, millilitre.

<sup>1</sup>Mode of delivery unknown in two women with Budd-Chiari syndrome and in four women with portal vein thrombosis

