

**Table S1** Additional patients' demographics characteristics (n=60)

Characteristics	Values
Race, n (%)	
Arab	36 (60.0)
Asian	17 (28.3)
Caucasian	7 (11.7)
Nationality, n (%)	
KSA	26 (43.3)
Oman	8 (13.3)
Kuwait	4 (6.7)
Qatar	1 (1.7)
UAE	1 (1.7)
Other	20 (33.3)
BMI (kg/m <sup>2</sup> ) (missing =14), mean (SD)	30.0 (6.5)
Marital status (missing =10), n (%)	
Married	39 (65.0)
Single	11 (18.3)
Educational status (missing =34), n (%)	
College/university	11 (18.3)
Primary/secondary school	12 (20.0)
Illiterate	3 (5.0)
Smoking status (missing =20), n (%)	
Current	11 (18.3)
Never	20 (33.3)
Occupation/employment (missing =35), n (%)	
Full time	13 (21.7)
Not employed	12 (20.0)
iTTP patients' classification, n (%)	
New iTTP cases	50 (83.3)
Recurrent iTTP cases <sup>‡</sup>	10 (16.7)
iTTP refractoriness, n (%)	
Refractory iTTP cases	8 (13.3)
Comorbidities at diagnosis <sup>†</sup> , n (%)	
Neurologic manifestations	37 (61.7)
Renal manifestations	19 (31.7)
Cardiac manifestations	9 (15.0)
Other manifestations	29 (48.3)

One patient might be labeled with more than 1 type of iTTP. <sup>‡</sup>, recurrence includes both relapses and exacerbation; <sup>†</sup>, every subject may have more than 1 comorbidity. KSA, Kingdom of Saudi Arabia; UAE, United Arab Emirates; BMI, body mass index; SD, standard deviation; iTTP, immune-mediated thrombotic thrombocytopenic purpura.

**Table S2** Detailed manifestations of the associated comorbidities experienced by the included patients (n=60)

Manifestations	N
<b>Neurologic manifestations<sup>†</sup></b>	
Arm heaviness	1
Back pain	1
Blurred vision	3
Confusion	19
Convulsions	1
CVA	1
Diaphoresis	1
Dizziness	3
Fatigue	2
Fever	3
Headache	19
Cerebral infarction	4
Jerky hand movements	1
Orthopnea	1
Low GCS	2
Seizure	2
Slurred speech	1
Stroke	1
Weakness	1
<b>Renal manifestations<sup>†</sup></b>	
Dark red urine	1
Eye puffiness	1
High creatinine	4
Hypertension	1
Kidney injury	4
Lower limb edema	1
Renal failure	2
Renal impairment	6
Turbid urine	1
<b>Cardiac manifestations<sup>†</sup></b>	
Chest pain	2
Dizziness	1
Hypertension	1
Increased troponin	1
Palpitation	4
Shortness of breath	1
Tachycardia	1
Tachypnea	1
<b>Other manifestations<sup>†</sup></b>	
Abdominal pain	2
Anemia	2
Aura	1
Bruising	3
Cataract	1
Chest infection	1
Convulsions	1
Covid 19	1
Craniotomy	1
Diabetes	1
Diarrhea	1
Ecchymotic patches	1
Epistaxis	1
Fatigue	6
Fever	6
Gall stones	1
Headache	1
Hemolysis	1
Hepatitis B	1
Hyperlipidemia	1
Hypertension	2
Hypothyroidism	2
Ischemic heart disease	1
Jaundice	5
Liver cirrhosis	1
Loose motion	1
Menorrhagia	1
Loss of appetite	1
Nausea	2
Obesity	1
Pallor	3
Petechia	5
Purpura	2
Rectal bleeding	1
Shortness of breath	1
Shoulder pain	1
Splenectomy	1
Termination of pregnancy	1
Vomiting	4
Weakness	1

<sup>†</sup>, every subject may have more than one neurologic, renal, cardiac, or other manifestation. CVA, cerebrovascular accident; GCS, Glasgow Coma Scale.

**Table S3** ICU admission and PEX availability for different patients' groups

Admission and availability of PEX services	Recurrent (exacerbated/relapsed)	New case	Total
ICU admission			
No	9 (15.00%)	11 (18.33%)	20 (33.33%)
Yes	1 (1.67%)	35 (58.33%)	36 (60.00%)
Availability of PEX service			
Yes	10 (16.67%)	47 (78.33%)	57 (95.00%)
NA	0 (0%)	3 (5.00%)	3 (5.00%)

ICU, intensive care unit; PEX, plasma exchange; NA, not applicable.

**Table S4** The average values for hospitalization days, ICU days, and PEX sessions

Hospitalization and PEX sessions	Recurrent (exacerbated/relapsed), mean $\pm$ SD	New case, mean $\pm$ SD
Hospitalization days	11 $\pm$ 5	23 $\pm$ 19
ICU days	–	16 $\pm$ 16
No of PEX sessions	7.8 $\pm$ 10	12 $\pm$ 9.9

ICU, intensive care unit; PEX, plasma exchange; SD, standard deviation.

**Table S5** Comparison of the effect of caplacizumab against other regimens on the length of stay

Patients' treatment regimens	Mean (days)	Standard deviation	P value
Caplacizumab	18.67	15.870	0.58
Other regimens	29.46	18.222	

**Table S6** Concomitant medications

Medication	Number of patients
Total	60
No	21
NA	4
Yes	35
Acetazolamide	1
Acyclovir	2
Albendazol	1
Alfacalcidol	1
Amikacin	1
Amlodipine	3
Aspirin	3
Atorvastatin	2
Bisoprolol	1
Calcium + vitamin D	5
Calcium supplement	6
Captopril	1
Cefazolin	2
Cefepime	1
Ceftriaxone	3
Chlorpheniramine	2
Clopidogril	1
Cyclosporine	1
Diltiazem	1
Diphenhydramine	4
Docusate	1
Enoxaparin	3
Entecavir	3
Epinephrine	1
Esomeprazole	4
Fentanyl	1
Ferric hydroxide	1
Folic acid	2
Furosemide	2
Haloperidol	1
Human albumin	1
Hydralazine	1
Hydrocortisone	5
Hydroxychloroquine	1
Immunoglobulin	1
Insulin	9
Irbesartan	1
Ivabradine	1
Labetalol	2
Lactulose syrup	1
Levetiracetam	6
Levofloxacin	1
Lisinopril	2
Magnesium oxide	1
Mannitol	1
Meperidine	1
Meropenem	2
Metformin	1
Metoprolol	1
Midazolam	1
N-acetyl cysteine	1
Nifedipine	3
Omeprazole	8
Pantoprazole	5
Paracetamol	8
Peiperacillin/tazobactam	1
Phenytoin	6
Potassium chloride	1
Praziquantel	1
Prednisolone	7
Rituximab	1
Rusovastatin	1
Senna tablet	1
Tazocin	1
Thyroxine	4
Valprote sodium	2
Vancomycin	6
Vitamin B supplement	1

NA, not applicable.

**Table S7** Other aTTP diagnostic tests used

Test	N (%)	Missing	Median (range)
Platelet count ( $\times 10^9/L$ )	59 (98.3)	1	13 (3–90)
Creatinine clearance test (mL/min)	23 (38.3)	37	99 (23–219.19)
Creatinine level ( $\mu\text{mol/L}$ )	57 (95.0)	3	98 (41–1,768)
Bilirubin ( $\mu\text{mol/L}$ )	55 (91.7)	5	30.7 (4.19–196.65)
Haptoglobin (g/L)	30 (50.0)	30	0.1 (0.01–0.216)
Peripheral blood smear, schistocytes (%)	23 (38.3)	37	4 (1–25)
Antiglobulin test, negative result	28 (46.7)	32	–

aTTP, acquired TTP; TTP, thrombotic thrombocytopenic purpura.

**Table S8** The referral hospital name (if outside the hospital)

Country	Hospital's name	N
United Arab Emirates	Rashid hospital	1
	Latifah Hospital	1
	Sheikh Shakhbout Medical City (SSMC)	1
	Burjeel Hospital	1
	NA	2
Saudi Arabia	Enak General Hospital	1
	East Jeddah Hospital	1
	Almajma Hospital	1
	Alobeid Hospital	1
	Prince Mohammad Hospital	1
	Sulaiman Alhabib Hospital	1
Oman	NA	19
	Rustaq Hospital	1
	Nizwa Hospital	1
	Sur Hospital	1
Kuwait	NA	3
	NA	2
Qatar	Primary Health Center	1
	NA	1

NA, not applicable.

**Table S9** The referral department's name (if inside the hospital)

Country	Department's name	N
United Arab Emirates	ICU Department	1
	Hematology Department	1
	NA	4
Saudi Arabia	Internal Medicine	5
	Hematology Department	2
	Nephrology Department	1
	Neurology Department	1
	Obstetrics & Gynecology	2
	Emergency Department	7
	Out-Patients Department	1
Oman	NA	6
	Internal Medicine	1
	Emergency Department	1
Kuwait	Internal Medicine	2
Qatar	Emergency Department	2

ICU, intensive care unit; NA, not applicable.