

Supplementary Online Content

Hakimian S, Raines D, Reed G, et al. Assessment of video capsule endoscopy in the management of acute gastrointestinal bleeding during the COVID-19 pandemic. *JAMA Netw Open*. 2021;4(7):e2118796. doi:10.1001/jamanetworkopen.2021.18796

eTable 1. Full List of Baseline Characteristics

eTable 2. Match Variables in Matched Populations

eTable 3. Secondary Analysis of Primary Outcome

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Full list of baseline characteristics		
	Covid (n=74)	SOC (n=72)
Age, mean (SD), y	64.9 (14.1)	61.3 (13.4)
Sex		
Male	45 (61)	47 (65)
Female	29 (39)	25 (35)
Race/ethnicity		
Caucasian	49 (66)	40 (56)
African American	12 (16)	16 (22)
Hispanic	4 (5)	6 (8)
Other	9 (12)	10 (14)
Comorbidities		
COPD	13 (18)	12 (17)
Congestive heart failure *	23 (31)	12 (17)
Coronary artery disease	27 (36)	24 (33)
Cirrhosis	13 (17)	17 (24)
End-stage renal disease	5 (7)	4 (6)
Severe Aortic stenosis	2 (3)	1 (1)
Diabetes	28 (38)	25 (35)
Other conditions treated during same hospitalization		
Acute respiratory failure	14 (19)	10 (14)
Acute renal failure	18 (24)	12 (17)
Sepsis	8 (11)	7 (10)
Pneumonia	8 (11)	5 (7)
Hypoxemia	23 (31)	22 (31)
ASA class		
1	1 (1)	1 (1)
2	11 (15)	7 (10)
3	51 (69)	48 (67)
4	11 (15)	16 (22)
Medication use		
NSAID use	9 (12)	14 (20)
Aspirin	33 (45)	27 (38)
Heparin	2 (3)	2 (3)
P2Y12 inhibitors	10 (14)	8 (11)
Warfarin	14 (19)	8 (11)
Direct oral anticoagulants	10 (14)	4 (6)
No anticoagulation	33 (45)	39 (54)

Baseline HGB (mg/dl), mean (SD)	10.5 (2.6)	11.3 (2.4)
INR>2	14 (19)	6 (9)
BUN/cr>20	48 (65)	44 (61)
Glasgow-Blatchford Score, mean (SD)	8.4 (2.4)	7.6 (2.9)
Presenting symptom		
Hematemesis	8 (11)	11 (15)
Melena	35 (47)	27 (38)
Hematochezia *	3 (4)	16 (22)
Anemia	28 (38)	18 (25)
Presenting with GI bleeding	51 (69)	53 (74)

Abbreviations: SOC, standard of care; COPD, chronic obstructive pulmonary disease, pRBC, packed red blood cell; NSAID, non-steroidal anti-inflammatory drugs; HGB, hemoglobin, INR, international normalized ratio.

eTable 2: Match Variables in matched population

variable	COVID (N =54)		SOC (N =54)		Std. Diff.
	Mean	±SD	Mean	±SD	
Age	61.46	±13.75	62.78	±12.70	-.099
GBS	8.04	±2.35	8.28	±2.43	-0.101
	N	(%)	N	(%)	
<u>Gender</u>					-0.077
Male	36	(66.7)	34	(63.0)	
Female	18	(33.3)	20	(37.0)	
<u>Caucasian</u>					-0.074
no	24	(44.4)	22	(40.7)	
yes	30	(55.6)	32	(59.3)	
<u>African American</u>					0.000
no	43	(79.6)	43	(79.6)	
yes	11	(20.4)	11	(20.4)	
<u>Hispanic</u>					0.000
no	50	(92.6)	50	(92.6)	
yes	4	(7.4)	4	(7.4)	
<u>Other</u>					0.103
no	45	(83.3)	47	(87.0)	
yes	9	(16.7)	7	(13.0)	
<u>Hematemesis</u>					0.053
no	46	(85.2)	47	(87.0)	
yes	8	(14.8)	7	(13.0)	
<u>Melena</u>					0.073
no	25	(46.3)	27	(50.0)	
yes	29	(53.7)	27	(50.0)	
<u>Hematochezia</u>					0.000
no	51	(94.4)	51	(94.4)	
yes	3	(5.6)	3	(5.6)	
<u>Anemia</u>					-0.122
no	40	(74.1)	37	(68.5)	
yes	14	(25.9)	17	(31.5)	

	COVID		SOC		
variable	(N =54)		(N =54)		Std. Diff.
<u>Cirrhosis/Liver fail.</u>					0.000
no	41	(75.9)	41	(75.9)	
yes	13	(24.1)	13	(24.1)	
<u>ESRD</u>					0.000
no	50	(92.6)	51	(94.4)	
yes	4	(7.4)	3	(5.6)	
<u>NSAID use</u>					-0.099
no	46	(85.2)	44	(81.5)	
yes	8	(14.8)	10	(18.5)	
<u>Aspirin</u>					-0.037
no	32	(59.3)	31	(57.4)	
yes	22	(40.7)	23	(42.6)	
<u>P2Y12</u>					0.056
no	47	(87.0)	48	(88.9)	
yes	7	(13.0)	6	(11.1)	
<u>Warfarin</u>					0.152
no	44	(81.5)	47	(87.0)	
yes	10	(18.5)	7	(13.0)	
<u>Direct Oral anticoagulants</u>					0.200
no	48	(88.9)	51	(94.4)	
yes	6	(11.1)	3	(5.6)	
<u>Heparin</u>					0.000
no	53	(98.1)	53	(98.1)	
yes	1	(1.9)	1	(1.9)	
<u>No Anti-Coagulant</u>					-0.037
no	28	(51.9)	27	(50.0)	
yes	26	(48.1)	27	(50.0)	

eTable 3- secondary analysis of primary outcome

Active Bleeding Visualized Models	Odds Ratio (COVID vs SOC)	95% Confidence Interval
Full population, MV adjusted ¹	5.23	2.23, 12.27
Full population on common support, MV adjusted ¹	5.08	2.12, 12.16
Matched Population	4.59	2.00, 10.49
Matched Population, adjusted for imbalance ²	4.75	2.02, 11.14

1: adjusted for gender, age, race, GBS, NSAID use, aspirin, Warfarin, direct oral anti-coagulants, no anti-coagulation, cirrhosis, ESRD, presenting symptoms

2: Warfarin, direct oral anti-coagulants