We would like to thank Debnath and Rathi for their interest in our study (1). Although sarcopenia is a well-recognized indicator of worse outcome in cirrhosis, little data exist on its impact in patients undergoing transjugular intrahepatic portosystemic shunt (TIPSS) placement for refractory ascites (2). Our study did not show any association between baseline sarcopenia and de novo hepatic encephalopathy (HE) or mortality.

We acknowledge that multiple sarcopenia definitions have been published. We chose total skeletal muscle and total psoas muscle indexed for height at the third lumbar vertebrae, L3-SMI, and L3-PMI, respectively, based on the recommendations of the North American Expert Opinion Statement on Sarcopenia and Liver Transplantation and the European Association for the Study of the Liver Guidelines on nutrition in chronic liver disease (3,4). Both studies recommend the use of L3-SMI as a marker of sarcopenia for outcome prediction. We also defined the presence of sarcopenia based on their recommendation which is a L3-SMI <39 cm²/m² in women and <50 cm²/m² in men. In our study, we found that regardless of which muscle index was used, neither L3-SMI nor L3-PMI sarcopenia were associated with mortality.

Second, we did not discuss the publication from Artru because it was made available after our article was published (5). That being said, we welcome this publication because it shows, similar to us, that TIPSS not only treats severe portal hypertension but also improves muscle mass. Unfortunately, Artru et al. did not report data using L3-SMI that is the recommended sarcopenia definition. Furthermore, the muscle index they used, which is the transverse right psoas muscle thickness divided by height, does not fully adjust for individual height that should have been squared and might not be representative of true muscle mass because it excluded assessment of the left psoas muscle. Finally, they included patients who had TIPSS for both refractory ascites and portal hypertensive bleeding, which was also the case in the study by Nardelli et al. (6). Parallels between our studies are unfortunately not possible. An important point to highlight is that according to our institutional policy, we did not perform TIPSS in patients with a previous overt episode of HE or in patients with subclinical HE according to an electroencephalogram during their diagnostic workup. The careful selection of patients and the indication of refractory ascites (rather than variceal bleeding) in our opinion explains this discrepancy with other studies.

Finally, as Debnath and Rathi point out, L3-SMI was significantly associated with de novo HE when it was assessed as a continuous variable, although the magnitude of that effect was small. When we performed the analysis using sarcopenia as a categorical variable, comparing those with and without sarcopenia, whether with L3-SMI or L3-PMI, we found no association with de novo HE. The latter approach is what has been favored by the international liver societies, which is clinically more relevant.

In conclusion, patients with refractory ascites requiring TIPSS insertion should undergo a thorough pre-TIPSS evaluation, but sarcopenia should not be considered a contraindication.

CONFLICTS OF INTEREST
Guarantor of the article: Emmanuel Tschochatzis, MD.
Specific author contributions: A.B. and E.T.: Drafting and revision of the manuscript.
Financial support: None to report.
Potential competing interests: None to report.

REFERENCES
1. Debnath, Rathi. Sarcopenia and TIPS: How best to measure muscle mass. Am J Gastroenterol 2020;115(6):1358.
2. Benmassaud A, Roccarina D, Arico F, et al. Sarcopenia does not worsen survival in patients with cirrhosis undergoing transjugular intrahepatic portosystemic shunt for refractory ascites. Am J Gastroenterol 2020;115:1911–4.
3. Carey EL, Lai JC, Sonnenday C, et al. A North American Expert Opinion Statement on sarcopenia in liver transplantation. Hepatology 2019;70:1816–29.
4. European Association for the Study of the Liver. Electronic address: easloffice@easloffice.eu; European Association for the Study of the Liver. EASL Clinical Practice Guidelines on nutrition in chronic liver disease. J Hepatol 2019;70:172–93.
5. Artru F, Miquet X, Azaahaf M, et al. Consequences of TIPSS placement on the body composition of patients with cirrhosis and severe portal hypertension: A large retrospective CT-based surveillance. Aliment Pharmacol Ther 2020;52:1516–26.
6. Nardelli S, Lattanzi B, Torrisi S, et al. Sarcopenia is risk factor for development of hepatic Encephalopathy after transjugular intrahepatic portosystemic Shunt placement. Clin Gastroenterol Hepatol 2017;15:934–6.

Coronavirus disease 2019 (COVID-19) (1) has disrupted many elective procedures including screening colonoscopy (2). We have tried to quantify the magnitude of the backlog created and time required to resolve it. As COVID-19 cases increase everywhere in the country besides New York, our backlog estimates are likely to be reflected nationwide.

To estimate backlog, we used historical monthly screening colonoscopy data for 14 hospitals and 1 ASC from January 2016 to May 2020, within a large health system in the New York metropolitan area which was heavily burdened by the COVID pandemic (3). To estimate the number of screening colonoscopies performed each month in the setting of the pandemic, we used a previously described triphasic sigmoidal recovery model (4). The first phase of the model was the shutdown phase, from March to May 2020, when elective procedures were halted. Second was the ramp-up phase, starting June 2020, when our health system started to increase its procedural volume. We modeled this using a Monte Carlo simulation of a Gompertz function, which is a sigmoidal growth function that has been used to analyze recovery after ecological disaster phenomenon (5). We assumed optimistic and pessimistic ramp-up scenarios, with growth constants of 0.9 and 0.5, respectively, arbitrarily chosen.

Aakash Aggarwal, MD1, Amit Jain, MD2, Purva Jain, BS3, Mahpeep Sangha, MD1, Petros C. Benias, MD4 and Arvind J. Trindade, MD4 and the Northwell COVID-19 Research Consortium

Am J Gastroenterol 2021;116:1359–1360. doi.org/10.14309/ajg.0000000000001097

¹Division of Gastroenterology and Hepatology, McGill University Health Centre, Montreal, Quebec, Canada; 2The Royal Free Sheila Sherlock Liver Centre, Royal Free London NHS Trust, London, UK; 3UCL Institute for Liver and Digestive Health, University College of London, London, UK.

© 2021 by The American College of Gastroenterology. Unauthorized reproduction of this article is prohibited.
since it is impossible to predict actual ramp-up velocity given unprecedented magnitude of procedural disruption. Third was the plateau phase where we assumed that the colonoscopy volume would revert to baseline expected case volumes at some future time. We simulated the time it would take to catch up on backlog if we increased throughput by 10%–30%/month after reaching reference monthly volume. We also sought to simulate the impact of future patient demand reduction (in case of a second COVID-19 wave, or future procedural suspensions) on backlog by simulating future patient referral (procedural demand) reduction by 10%.

Before the pandemic, in our health system, we performed 291 screening colonoscopies in January 2020 (used as reference volume for comparison). This was consistent with the monthly average for 2019, which was 295 cases/month. Based on a Monte Carlo simulation, it would take up to 4 or 6 months under the optimistic and pessimistic scenarios, respectively, to reach the reference monthly colonoscopy volume (Figure 1).

By June 2021, cumulative colonoscopy backlog would reach 3.0-months-worth under the optimistic ramp-up scenario and 3.0-months-worth under the pessimistic scenario by June 2021. Under the optimistic scenario, if production was increased by 10%/month starting September 2020, it would take 27 months to catch up on backlog, and if production increased by 30%/month, it would take 9 months to catch up on the backlog.

Our data show the pandemic has created 3–4 months backlog of screening colonoscopies. Catch-up period for procedural backlog could vary anywhere from 1–2 years. We show how the COVID-19 pandemic affects screening colonoscopy volume and highlights the need to plan appropriate mitigation strategies.

CONFLICTS OF INTEREST
Guarantor of the article: Aakash Aggarwal, MD.

Specific author contributions: Study conception and design: A.A. and A.J.; acquisition of data: A.J.T.; analysis and interpretation of data: A.A., A.J., and P.J.; drafting of manuscript: A.A., A.J., and M.S.; critical revision: A.J.T. and P.C.B.; final approval: A.A., A.J., P.J., M.S., P.C.B., and A.J.T.

Financial support: None to report.

Potential competing interests: A.J.T.—Consultant to Olympus America and Pentax Medical, Research Support to Ninepoint Medical. P.C.B.—Consultant to Olympus America, Boston Scientific, Fujifilm, and Apollo Endosurgery. A.J.—Consultant to Stryker Spine, DePuy Spine.