

Supplementary Material

NAMPT and NAPRT serum levels predict response to anti-TNF therapy in inflammatory bowel disease

Giorgia Colombo^{1§}, Gian Paolo Caviglia^{2§}, Alberto Ravera², Elisa Tribocco², Simone Frara², Chiara Rosso², Cristina Travelli³, Armando A. Genazzani^{1#*}, Davide Giuseppe Ribaldone^{2#*}

¹Department of Pharmaceutical Sciences, Università del Piemonte Orientale, Novara, 28100, Italy.

²Division of Gastroenterology, Department of Medical Sciences, Università di Torino, 10100, Italy.

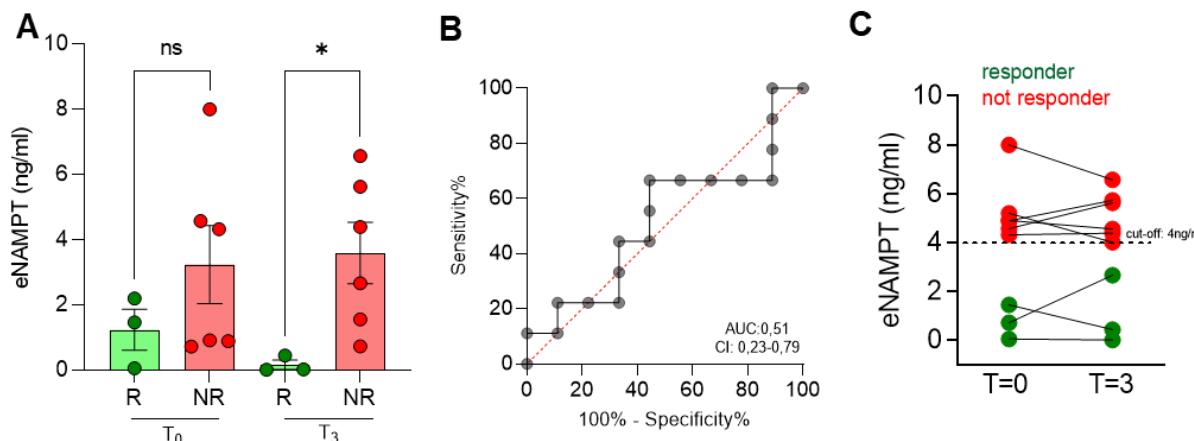
³ Department of Drug Sciences, Università degli Studi di Pavia, Pavia, 27100, Italy.

§ These authors contributed equally to the work

These authors contributed equally to the work

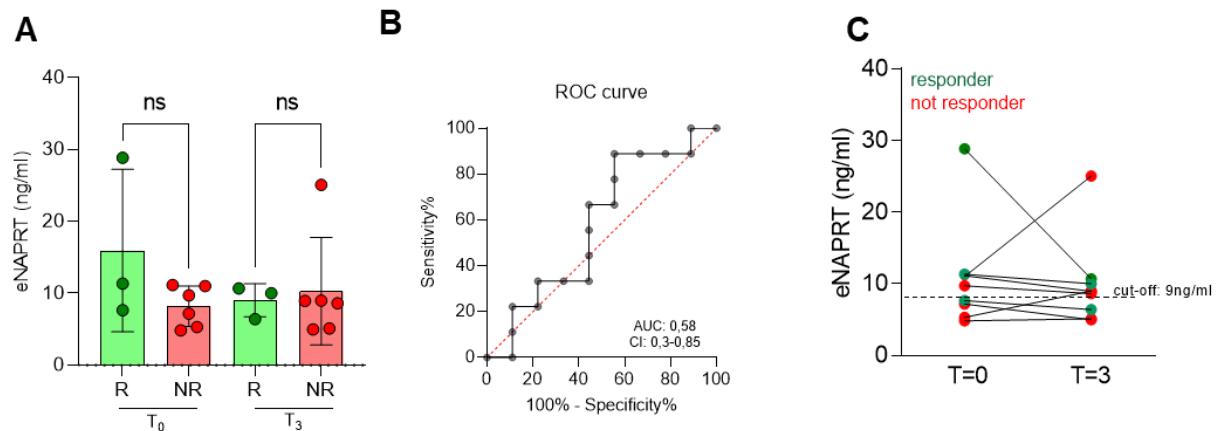
*** Correspondence:**

Corresponding authors, armando.genazzani@uniupo.it, davidegiuseppe.ribaldone@unito.it



Supplementary Figure 1. (A) eNAMPT levels in R and NR to ustekinumab at baseline (T=0) and after 3 months from the first infusion (T=3). N=9: CD=5, UC=4. **(B)** ROC curve of ustekinumab

response. (C) eNAMPT levels in single patients after ustekinumab infusion. N=9: CD=5, UC=4. Red dots represent NR, green dots represent R.



Supplementary Figure 2. (A) eNAPRT levels in R and NR to ustekinumab at baseline ($T=0$) and after 3 months from the first infusion ($T=3$). N=9: CD=5, UC=4. (B) ROC curve of ustekinumab response. (C) eNAPRT levels in single patients after ustekinumab infusion. N=9: CD=5, UC=4. Red dots represent NR, green dots represent R.

	Moschen, 2007 ¹³	Valentini, 2007 ¹⁹	Waluga, 2014 ¹⁵	Dogan, 2016 ¹⁴	Terzoudis, 2016 ¹⁷	Neubauer, 2019 ¹⁶	Colombo, 2020 ¹²	Saadoun, 2021 ¹⁸	Colombo, present contribution
Number of Patients	HC 38 CD 39 UC 35	HC 37 CD 67 UC 61	HC 16 CD 24 UC 16	HC 29 CD 0 UC 31	HC 98 CD 68 52 UC	no-IBD 60# CD 113 UC 127	HC 11 CD 64 UC 22	HC 30 CD 29 UC 56	HC 18 CD 128 UC 52
Evaluation									
eNAMPT (HC vs IBD) ^a	↑	n.r.	↑	n.r.	n.r.	↑	↑	↑	↑
eNAMPT (active <i>vs</i> inactive/remission)	0 in CD ↑ in UC	0 in CD ↑ in UC	n.r.	n.r. in CD ↑ in UC	n.r.	0 in CD ↑ in UC	n.r.	n.r.	↑ in CD ↑ in UC
CRP	n.r.	0	n.r.	n.r.	0	0 (hsCRP)	n.r.	+	+
Severity	n.r.	n.r.	0 Montreal classification	n.r.	n.r.	+ Rachmilewitz index (UC) + Mayo endoscopic score (UC)	n.r.	+ Montreal classification	+ Severity score (HBI and Mayo's score)
Calprotectin	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	+	0
IL-6	n.r.	n.r.	n.r.	n.r.	n.r.	+	n.r.	n.r.	+
IL-10	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	-
IL-8	n.r.	n.r.	n.r.	n.r.	n.r.	+	n.r.	n.r.	0
TNF α	n.r.	n.r.	n.r.	n.r.	n.r.	+ (active disease)	n.r.	n.r.	0
Age	n.r.	n.r.	n.r.	n.r.	n.r.	0	n.r.	0	0
Years of disease	n.r.	0	0	n.r.	0	0	n.r.	n.r.	0

Supplementary Table I. Evidence so far gathered on eNAMPT in IBD patients. Information was extracted either from the text or from the Figures/Tables of the indicated manuscripts. HC healthy controls; CD Crohn's disease; UC ulcerative colitis; n.r. not reported; + positive correlation; 0 no correlation or no change; - negative correlation; ↑ increase; ^aoverall population studied, independently of variables (e.g., active, remission, severity). #no-IBD included both healthy patients and patients suffering from irritable bowel disease.