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Authors: M. Manuela Rosado, Alaitz Aranburu, Marco Scarsella, Simona Cascioli, Ezio Giorda, Federica Del Chierico, Stefano Levi Mortera, Eva Piano Mortari, Stefania Petrini, Lorenza Putignani, Rita Carsetti

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SPLEEN DEVELOPMENT IS MODULATED BY NEONATAL GUT MICROBIOTA

M. Manuela Rosado^{1*}, Alaitz Aranburu^{1*§}, Marco Scarsella¹, Simona Cascioli¹, Ezio Giorda¹,

Federica Del Chierico², Stefano Levi Mortera², Eva Piano Mortari¹, Stefania Petrini³, Lorenza

Putignani² and Rita Carsetti¹

¹B cell Physiopathology Unit, Immunology Research Area, Bambino Gesù Children Hospital, Rome, Italy;

²Human Microbiome Unit, Area of Genetic and Rare Diseases, Bambino Gesù Children's Hospital, Roma, Italy;

³Confocal Microscopy Core Facility, Bambino Gesù Children's Hospital, Roma, Italy

* Equally contributed to the present work

§ Present address: Department of Rheumatology and Inflammation Research, University of

Gothenburg, Box 480, SE-405 30 Gothenburg, Sweden.

Corresponding author:

M. Manuela Rosado

E-mail: manuela.rosado@immunologyhomepage.

Highlights:

1) Gut microbiota modulates neonatal spleen development.

2) Pathogenic and opportunistic species induce:

a) fast development of marginal zone B cells and IgM plasma cells in the forming spleen

b) delayed construction of primary follicles and FDC network in the spleen

c) precocious appearance of IgA in the serum and secretory IgA in the intestine

ABSTRACT

The full development of the mammalian immune system occurs after birth upon exposure to non self-

antigens. The gut is the first site of bacterial colonization where it is crucial to create the appropriate

microenvironment able to balance effector or tolerogenic responses to external stimuli. It is a well-

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