



# RESOLOMICS

*Enhanced diagnostic signatures for patient stratification and improved clinical management of human diseases*

1. Allen BL, Montague-Cardoso K, Simeoli R, Colas RA, Oggero S, Vilar B, McNaughton PA, Dalli J, Perretti M, Sher E, Malcangio M. Imbalance of pro-resolving lipid mediators in persistent allodynia dissociated from signs of clinical arthritis. *Pain*. 2020 May 4. doi: 10.1097/j.pain.0000000000001908.
2. Souza PR, Marques RM, Gomez EA, Colas RA, De Matteis R, Zak A, Patel M, Collier DJ and Dalli J. Enriched marine oil supplements increase peripheral blood specialized pro-resolving mediator concentrations and reprogram host immune responses: A randomized double-blind placebo-controlled study. *Circ Res*. 2020 Jan 3;126(1):75-90. doi: 10.1161/CIRCRESAHA.119.315506
3. Flak MB, Koenis DS, Sobrino A, Smith J, Pistorius K, Palmas F, Dalli J. GPR101 mediates the pro-resolving actions of RvD5n-3 DPA in arthritis and infections. *J Clin Invest*. 2019 Dec 3. pii: 131609. doi: 10.1172/JCI131609.
4. Shivakoti R, Dalli J, Kadam D, Gaikwad S, Barthwal M, Colas RA, Mazzacuva F, Lokhande R, Dharmshale S, Bharadwaj R, Kagal A, Pradhan N, Deshmukh S, Atre S, Sahasrabudhe T, Kakrani A, Kulkarni V, Raskar S, Suryavanshi N, Chon S, Gupte A, Gupta A, Gupte N, Arriaga MB, Fukutani KF, Andrade BB, Golub JE, Mave V. Lipid mediators of inflammation and Resolution in individuals with tuberculosis and tuberculosis-Diabetes. *Prostaglandins Other Lipid Mediat*. 2019 Nov 11;147:106398.
5. Colas RA, Nhat LTH, Thuong NTT, Gómez EA, Ly L, Thanh HH, Mai NTH, Phu NH, Thwaites GE, Dalli J. Proresolving mediator profiles in cerebrospinal fluid are linked with disease severity and outcome in adults with tuberculous meningitis. *FASEB J*. 2019 Sep 7:fj201901590R.
6. Fosshaug LE, Colas RA, Anstensrud AK, Gregersen I, Nymo S, Sagen EL, Michelsen A, Vinge LE, Øie E, Gullestad L, Halvorsen B, Hansen TV, Aukrust P, Dalli J\*, Yndestad A\*. Early increase of specialized pro-resolving lipid mediators in patients with ST-elevation myocardial infarction. *EBioMedicine*. 2019 Aug;46:264-273.
7. Flak MB, Colas RA, Muñoz-Atienza E, Curtis MA, Dalli J\*, Pitzalis C\*. Inflammatory arthritis disrupts gut resolution mechanisms, promoting barrier breakdown by *Porphyromonas gingivalis*. *JCI Insight*. 2019 Jul 11;4(13). pii: 125191. doi: 10.1172/jci.insight.125191

8. Motwani MP, Colas RA, George MJ, Flint JD, Dalli J, Richard-Loendt A, De Maeyer RP, Serhan CN, Gilroy DW. Pro-resolving mediators promote resolution in a human skin model of UV-killed *Escherichia coli*-driven acute inflammation. *JCI Insight*. 2018 Mar 22;3(6). pii: 94463.
9. Mai NT, Dobbs N, Phu NH, Colas RA, Thao LT, Thuong NT, Nghia HD, Hanh NH, Hang NT, Heemskerk AD, Day JN, Ly L, Thu DD, Merson L, Kestelyn E, Wolbers M, Geskus R, Summers D, Chau NV, Dalli J, Thwaites GE. A randomised double blind placebo controlled phase 2 trial of adjunctive aspirin for tuberculous meningitis in HIV-uninfected adults. *Elife*. 2018 Feb 27;7. pii: e33478.
10. Colas RA, Souza PR, Walker ME, Burton M, Marques RM, Zaslona Z, Curtis AM, Dalli J. Impaired Production and Diurnal Regulation of Vascular RvDn-3 DPA Increases Systemic Inflammation and Cardiovascular Disease. *Circ Res*. 2018 Feb 5. pii: CIRCRESAHA.117.312472. PMID: 29437834
11. Dalli J, Colas RA, Walker ME, Serhan CN. Lipid Mediator Metabolomics Via LC-MS/MS Profiling and Analysis. *Methods Mol Biol*. 2018;1730:59-72.
12. Motwani MP, Newson J, Kwong S, Richard-Loendt A, Colas R, Dalli J, Gilroy DW. Prolonged immune alteration following resolution of acute inflammation in humans. *PLoS One*. 2017 Oct 26;12(10):e0186964.
13. Dakin SG, Ly L, Colas RA, Oppermann U, Whewey K, Watkins B, Dalli J\*, Carr AJ\*. Increased 15-PGDH expression leads to dysregulated resolution responses in stromal cells from patients with chronic tendinopathy. *Sci Rep*. 2017 Sep 8;7(1):11009.
14. China L, Maini A, Skene SS, Shabir Z, Sylvestre Y, Colas RA, Ly L, Becares Salles N, Belloti V, Dalli J, Gilroy DW, O'Brien A. Albumin Counteracts Immune-Suppressive Effects of Lipid Mediators in Patients With Advanced Liver Disease. *Clin Gastroenterol Hepatol*. 2017 Aug 30. pii: S1542-3565(17)30993-X.
15. Walker ME, Souza PR, Colas RA, Dalli J. 13-series resolvins mediate the leukocyte-platelet actions of atorvastatin and pravastatin in inflammatory arthritis. *FASEB J*. 2017 May 2. pii: fj.201700268. doi: 10.1096/fj.201700268.
16. Gobbetti T, Dalli J, Colas RA, Federici Canova D, Aursnes M, Bonnet D, Alric L, Vergnolle N, Deraison C, Hansen TV, Serhan CN, Perretti M. Protectin D1 n-3 DPA and resolvin D5 n-3 DPA are effectors of intestinal protection. *Proc Natl Acad Sci U S A*. 2017 Mar 29. pii: 201617290.
17. Dalli J, Colas RA, Arnardottir HH, and Serhan CN Group-3 Innate lymphoid cells and PCTR1 govern phagocyte response and infectious resolution via neuronal control. *Immunity* 2017 Jan 17;46(1):92-105.
18. Rathod KS, Kapil V, Velmurugan S, Khambata RS, Siddique U, Khan S, Van Eijl S, Gee LC, Bansal J, Pitrola K, Shaw C, D'Acquisto F, Colas RA, Marelli-Berg F, Dalli J, Ahluwalia A. Accelerated resolution of inflammation underlies sex differences in inflammatory responses in humans. *J Clin Invest*. 2016 Nov 28. pii: 89429.

19. Dalli J, Vlasakov I, Riley IR, Rodriguez AR, Spur BW, Petasis NA, Chiang N, Serhan CN. Maresin conjugates in tissue regeneration biosynthesis enzymes in human macrophages. *Proc Natl Acad Sci U S A*. 2016 Oct 25;113(43):12232-12237.
20. Dalli J, Colas RA, Quintana C, Barragan-Bradford D, Hurwitz S, Levy BD, Choi AM, Serhan CN, Baron RM. Human Sepsis Eicosanoid and Proresolving Lipid Mediator Temporal Profiles: Correlations With Survival and Clinical Outcomes. *Crit Care Med*. 2017 Jan;45(1):58-68.
21. Elajami TK, Colas RA, Dalli J, Chiang N, Serhan CN, Welty FK. Specialized proresolving lipid mediators in patients with coronary artery disease and their potential for clot remodeling. *FASEB J*. 2016 Apr 27. pii: fj.201500155R.
22. Dalli J, Sanger JM, Rodriguez AR, Chiang N, Spur BW, Serhan CN. Identification and Actions of a Novel Third Maresin Conjugate in Tissue Regeneration: MCTR3. *PLoS One*. 2016 Feb 16;11(2):e0149319.
23. Dalli J, Chiang N, Serhan CN. Elucidation of novel 13-series resolvins that increase with atorvastatin and clear infections. *Nat Med*. 2015 Sep;21(9):1071-5.
24. Dalli J, Ramon S, Norris PC, Colas RC and Serhan CN. Novel Proresolving and Tissue Regenerative Resolvin and Protectin Sulfido-Conjugated Pathways. *The FASEB Journal*. 2015 Feb 20. pii: fj.14-268441.
25. Dalli J, Chiang N, Serhan CN. Identification of 14-Series Sulfido-Conjugated Mediators That Promote Resolution of Infection and Organ Protection. *Proc Natl Acad Sci U S A*. 2014 Nov 4;111(44):E4753-61

