DANIELA CESSELLI (https://people.uniud.it/page/daniela.cesselli)

POSITION: Associate professor at the Department of Medical and Biological Sciences in the competition sector 06/A4 Anatomical Pathology.

EDUCATION AND TRAINING

- **1998: MD degree**; University of Udine; 110/110 with honors.
- **2002: Specialization in medical Oncology**; University of Udine; 70/70 with honors.
- **2006: PhD**; University of Siena; Faculty of Medicine; PhD program in "Quantitative and molecular diagnostic pathology" - XVIII cycle.

RESEARCH ACTIVITY

November 2016-today: Coordination of a project focused on liquid biopsy and precision medicine in glioma and heart failure at the University Hospital of Udine. The research program is focused on the study and characterization of pathological and functional abnormalities of stem cells in brain tumors and in heart disease and in the application of "liquid biopsy" (i.e. circulating tumor cells, exosomes, circulating DNA) to malignant tumors. The research, with a strong translational connotation, aims at: 1) developing and employing advanced diagnostic techniques to improve the criteria for both the prognostic stratification of patients and the prediction of response to therapy and 2) suggesting new therapeutic strategies, pursuing, as far as possible, a patient-based approach.

June 2012-November 2016: Coordination of the Biomedical Research Group within the European Grant, 7FP, Ideas, ERC Advanced Grant "Molecular Nanotechnology For Life Science Application: QUantitative Interactomics for Diagnostics, Proteomics and QUantitative Oncology, (Quidroquo-QPQ-) proposal n. 269025. ***P.I. Prof. G. Scoles*** (http://monalisa.uniud.it/?q=daniela-cesselli). The project overall aimed at developing and applying the most innovative technologies for the understanding of highly debilitating and fatal diseases, such as cancer, heart disease and neurodegenerative diseases. Since nanotechnologies are particularly suitable for analytes and events that are small in number (e.g. stem cells and circulating tumor cells), or size (e.g. exosomes) or concentration (e.g. circulating miRNAs), we explored our clinical issues taking advantage of nano-devices for the study of patient-derived stem cells, exosomes and miRNAs. The ultimate goal was therefore to profoundly affect the life of patients by improving diagnostics, providing new prognostic systems and improving the criteria for the choice of the therapeutic strategy, pursuing, as much as possible, a personalized patient-based approach.

July 2009 – July 2013: Principal investigator of Young Investigator Grant, Italian Ministry of Health, GR-2007-683407: "Employment of Adipose tissue derived Multipotent Adult Stem Cells for cardiovascular regeneration".

6/3/2010-2/4/2010: Visiting scientist at the ***Brigham and Women's Hospital***, Department of Anesthesia, Boston, MA, USA. Collaboration with Prof. A. Leri on a project focused on cardiac stem cell senescence

January 2003 –May 2010: Research activity at the Institute of Pathology, ***University of Udine***. Organization and coordination of a research group together with Dr A.P. Beltrami focused on: 1. use of stem cells in cardiac, hepatic and neural regenerative medicine; 2. Stem cells in human ovarian, liver and brain cancer.

January 2000 – January 2003: Research Fellow at the ***Cardiovascular Research Institute, New York Medical College***, Valhalla, NY (USA) directed by Prof. P. Anversa. Identification and characterization of cardiac stem cell niches in a murine model.

TEACHING ACTIVITY

Present teaching activity in degree courses at the University of Udine:

1. **Medicine: Anatomical Pathology**
2. **Biotecnologies: Molecular diagnostics**

CLINICAL ACTIVITY

2021-today: official member of the molecular tumor board of ASUFC (Azienda Sanitaria Universitaria del Friuli Centrale)

December 2017-today: physician at the Institute of Pathology of the University Hospital of Udine

SCIENTIFIC PRODUCTIONS:

102 publications in peer-reviewed journals (H-index 31; total number of citation 4423; source: Scopus). 6 chapters in books.

FUNDED GRANTS

Ongoing

AIRC 2018-2022. "Dissecting the heterogeneity of circulating tumor cells in metastatic breast cancer patients to predict clinical outcome". IG20443. Role: PI

Regione FVG "Progetto di ricerca traslazionale e sviluppo preclinico di strategie terapeutiche innovative e predittive per l'ottimizzazione del trattamento di tumori cerebrali". CUP G25F21002420005. Role: Co-PI

Past

Contributi per la ricerca clinica, traslazionale, di base, epidemiologica e organizzativa, di cui all'articolo 15, comma 2, lettera b), della legge regionale FVG 17/2014. LP IOM/CNR. Project BIOMEC: Applicazione delle tecnologie biomeccaniche ad integrazione delle metodiche tradizionali nel contesto ospedaliero. Ruolo: Responsabile di Unità Operativa. 2017-2021.

POR FESR 2014-2020 Regione FVG. Project ARES: "Against bRain cancEr: finding personalized therapies with in Silico and in vitro strategies". LP Exact Lab. Role: Responsible of Operative Unit. 2018-2022.

Contributi per la ricerca clinica, traslazionale, di base, epidemiologica e organizzativa, di cui all'articolo 15, comma 2, lettera b), della legge regionale FVG 17/2014. Project GLIOBLASTOMA: Infiltrazione nei gliomi: nuovo target terapeutico. Role: Responsible of Operative Unit. 2018-2021.

Interreg Italia-Austria 2014-2020. "Exosomes for regenerative, immunosuppressive, neuroprotective, and oncosuppressive therapies". LP Elettra Sincrotrone. Role: Responsible of Operative Unit. 2017-2020

Italian Ministry of Health. Young researcher grant "***Use of adult multipotent stem cells from adipose tissue for cardiac regeneration". GR-2007-683407. 2009-2013. Role: PI***

CONTRIBUTION TO *OTHER GRANTS RELEVANT FOR THE RESEARCH*.

Contribution to the writing and execution of the following grant: **1.** ERC Advanced Grant "Molecular Nanotechnology For Life Science Application: QUantitative Interactomics for Diagnostics, Proteomics and QUantitative Oncology, proposal n. 269025. P.I. Prof. G. Scoles; **2.** AIRC 5 per mille "Application of Advanced Nanotechnology in the Development of Innovative Cancer Diagnostics Tools". Rif. 12214. 2012-2014. PI G. Toffoli. Project Partner: CA Beltrami (University of Udine); **3.** Programma Italia-Slovenia 2007-2013. Title: "Identificazione di nuovi marcatori di cellule staminali tumorali a scopo diagnostico e

terapeutico". 2011-2013. Project Partner CA Beltrami (University Hospital of Udine); **4**. FIRB 2011. "FIERCE – FInd nEw moleculaR and CEllular targets against cancer". Pr. RBAP11Z4Z9. 2012-2014. Coordinator: M. Giacca (ICGEB). Project Partner CA Beltrami (Udine University); **5.** FIRB 2011 pr. RBAP11ETKA_007 "Nanotechnological approaches for tumor theragnostic". Coordinator: Maurizio Prato. Project Partner AP Beltrami (Udine University).

SCIENTIFIC COLLABORATIONS

Department of Medicine, University of Udine: Prof. Miriam Isola, PhD; Prof. Francesco Curcio, MD; Prof. Fabio Puglisi, MD PHD; Prof. Gianluca Tell, PhD.

Udine University Hospital: Dr. Miran Skrap, MD, Dr. Tamara Ius, MD PhD, Department of Neurosurgery; Dr. Andrea Dardis, PhD, Regional Coordination Center for Rare Diseases; Prof. Ugolino Livi, Department of Cardiac Surgery; Prof. Pier Camillo Parodi, Clinic of Plastic Surgery;

Italian collaborations: ICGEB Trieste Dr. Serena Zacchigna, MD PhD; IOM/CNR Trieste Dr. Alessandra Magistrato PhD, Prof. Vincent Torre, PhD; Dr Marco Lazzarino, PhD); ELETTRA Synchrotron Trieste: Dr. Loredana Casalis, PhD, Coordinator of NanoInnovationLAB; Dr. Paola Storici, PhD, Senior Research Scientist; Institute of Applied Genomics: Prof. M. Morgante, PhD, Director; Dr. Federica Cattonaro, PhD, Lab Director; IRCCS Foundation Institute for Neurology "Carlo Besta", IFOM-IEO-Campus, Milan, Italy: Dr. Silke Krol; University of Verona: Prof. Marco Colombatti, MD and Dr. Giulio Fracasso, PhD, Department of Pathology and Diagnostics.

International collaborations: Prof. Tamara Lah Turnsek, Ph.D, Director of "National Institute of Biology", Slovenia; Prof. Radovan Komel, PhD, University of Ljubljana, Medical Center for Molecular Biology, Slovenia; Prof. Ario de Marco, PhD, University of Nova Gorica, Center for biomedical sciences and engineering, Slovenia; Curie Institute, Paris, France; Dr. Enrico Ferrari, PhD, Senior Lecturer, School of Life Sciences, College of Science, University of Lincoln, UK; Prof. Alessandro Vindigni, PhD, Department of Biochemistry and Molecular Biology, Saint Louis University School of Medicine, St. Louis, Missouri, USA; Prof. P. Madeddu, MD, Director of "Experimental Cardiovascular Medicine and Head of the Section of Regenerative Medicine, School of Medicine", University of Bristol, UK.

REVIEWER ACTIVITY

- Ad Hoc Reviewer for the following journals: Diabetes, PlosONE, Stem Cells, Rejuvenation Research, Journal of Cellular and Molecular Medicine, Journal of Cardiovascular Translational Research, Experimental Gerontology, Tissue Engineering, Circulation (AHA annual meeting), International Journal of Molecular Sciences, CANCERS.
- Guest Editor of one special issue in Frontiers Immunology.

PATENT

Request 812021000145730 (drug cocktail for glioma)

PUBLICATIONS

1. Spelat, R.; Jihua, N.; Sanchez Trivino, C.A.; Pifferi, S.; Pozzi, D.; Manzati, M.; Mortal, S.; Schiavo, I.; Spada, F.; Zanchetta, M.E., et al. The dual action of glioma-derived exosomes on neuronal activity: synchronization and disruption of synchrony. *Cell Death Dis* **2022**, *13*, 705, doi:10.1038/s41419-022-05144-6.
2. Senigagliesi, B.; Samperi, G.; Cefarin, N.; Gneo, L.; Petrosino, S.; Apollonio, M.; Caponnetto, F.; Sgarra, R.; Collavin, L.; Cesselli, D., et al. Triple negative breast cancer-derived small extracellular

vesicles as modulator of biomechanics in target cells. *Nanomedicine* **2022**, *44*, 102582, doi:10.1016/j.nano.2022.102582.
3. Ricciardi, L.; Manini, I.; Cesselli, D.; Trungu, S.; Piazza, A.; Mangraviti, A.; Miscusi, M.; Raco, A.; Ius, T. Carmustine Wafers Implantation in Patients With Newly Diagnosed High Grade Glioma: Is It Still an Option? *Front Neurol* **2022**, *13*, 884158, doi:10.3389/fneur.2022.884158.
4. Puca, A.A.; Lopardo, V.; Montella, F.; Di Pietro, P.; Cesselli, D.; Rolle, I.G.; Bulfoni, M.; Di Sarno, V.; Iaconetta, G.; Campiglia, P., et al. The Longevity-Associated Variant of BPIFB4 Reduces Senescence in Glioma Cells and in Patients' Lymphocytes Favoring Chemotherapy Efficacy. *Cells* **2022**, *11*, doi:10.3390/cells11020294.
5. Orioles, M.; Sacca, E.; Metselaar, M.; Bulfoni, M.; Cesselli, D.; Galeotti, M. Observations on Red Mark Syndrome in juvenile rainbow trout farmed in RAS system. *J Fish Dis* **2022**, 10.1111/jfd.13707, doi:10.1111/jfd.13707.
6. Muraro, E.; Del Ben, F.; Turetta, M.; Cesselli, D.; Bulfoni, M.; Zamarchi, R.; Rossi, E.; Spazzapan, S.; Dolcetti, R.; Steffan, A., et al. Clinical relevance of the combined analysis of circulating tumor cells and anti-tumor T-cell immunity in metastatic breast cancer patients. *Front Oncol* **2022**, *12*, 983887, doi:10.3389/fonc.2022.983887.
7. Menna, G.; Manini, I.; Cesselli, D.; Skrap, M.; Olivi, A.; Ius, T.; Della Pepa, G.M. Immunoregulatory effects of glioma-associated stem cells on the glioblastoma peritumoral microenvironment: a differential PD-L1 expression from core to periphery? *Neurosurg Focus* **2022**, *52*, E4, doi:10.3171/2021.11.FOCUS21589.
8. Manini, I.; Dalla, E.; Vendramin, V.; Cesselli, D.; Di Loreto, C.; Skrap, M.; Ius, T. Identification of a Prognostic Microenvironment-Related Gene Signature in Glioblastoma Patients Treated with Carmustine Wafers. *Cancers (Basel)* **2022**, *14*, doi:10.3390/cancers14143413.
9. Dalla, E.; Bulfoni, M.; Cesselli, D.; Pravisani, R.; Hidaka, M.; Eguchi, S.; Baccarani, U. Reinfection of Transplanted Livers in HCV- and HCV/HIV-Infected Patients Is Characterized by a Different MicroRNA Expression Profile. *Cells* **2022**, *11*, doi:10.3390/cells11040690.
10. Da Col, G.; Del Ben, F.; Bulfoni, M.; Turetta, M.; Gerratana, L.; Bertozzi, S.; Beltrami, A.P.; Cesselli, D. Image Analysis of Circulating Tumor Cells and Leukocytes Predicts Survival and Metastatic Pattern in Breast Cancer Patients. *Front Oncol* **2022**, *12*, 725318, doi:10.3389/fonc.2022.725318.
11. Caccese, M.; Simonelli, M.; Villani, V.; Rizzato, S.; Ius, T.; Pasqualetti, F.; Russo, M.; Ruda, R.; Amoroso, R.; Bellu, L., et al. Definition of the Prognostic Role of MGMT Promoter Methylation Value by Pyrosequencing in Newly Diagnosed IDH Wild-Type Glioblastoma Patients Treated with Radiochemotherapy: A Large Multicenter Study. *Cancers (Basel)* **2022**, *14*, doi:10.3390/cancers14102425.
12. Bulfoni, M.; Sozio, E.; Marcon, B.; De Martino, M.; Cesselli, D.; De Carlo, C.; Martinella, R.; Migotti, A.; Vania, E.; Zanus-Fortes, A., et al. Validation of a Saliva-Based Test for the Molecular Diagnosis of SARS-CoV-2 Infection. *Dis Markers* **2022**, *2022*, 6478434, doi:10.1155/2022/6478434.
13. Bertozzi, S.; Corradetti, B.; Seriau, L.; Diaz Nanez, J.A.; Cedolini, C.; Fruscalzo, A.; Cesselli, D.; Cagnacci, A.; Londero, A.P. Nanotechnologies in Obstetrics and Cancer during Pregnancy: A Narrative Review. *J Pers Med* **2022**, *12*, doi:10.3390/jpm12081324.
14. Rolle, I.G.; Crivellari, I.; Zanello, A.; Mazzega, E.; Dalla, E.; Bulfoni, M.; Avolio, E.; Battistella, A.; Lazzarino, M.; Cellot, A., et al. Heart failure impairs the mechanotransduction properties of human cardiac pericytes. *J Mol Cell Cardiol* **2021**, *151*, 15-30, doi:10.1016/j.yjmcc.2020.10.016.
15. Langiano, N.; Brussa, A.; Riccardi, I.; Meroi, F.; Toso, F.; Cesselli, D.; Vetrugno, L.; Bove, T. A Rare Cause of Respiratory Insufficiency in a 30-Year-Old Transgender Woman. *Chest* **2021**, *160*, e339-e342, doi:10.1016/j.chest.2021.05.054.
16. Bulfoni, M.; Pravisani, R.; Dalla, E.; Cesselli, D.; Hidaka, M.; Di Loreto, C.; Eguchi, S.; Baccarani, U. miRNA expression profiles in liver grafts of HCV and HIV/HCV-infected recipients, 6 months after liver transplantation. *J Med Virol* **2021**, *93*, 4992-5000, doi:10.1002/jmv.26999.
17. Bertozzi, S.; Londero, A.P.; Viola, L.; Orsaria, M.; Bulfoni, M.; Marzinotto, S.; Corradetti, B.; Baccarani, U.; Cesselli, D.; Cedolini, C., et al. TFEB, SIRT1, CARM1, Beclin-1 expression and PITX2

methylation in breast cancer chemoresistance: a retrospective study. *BMC Cancer* **2021**, *21*, 1118, doi:10.1186/s12885-021-08844-y.
18. Rolle, I.G.; Crivellari, I.; Zanello, A.; Mazzega, E.; Dalla, E.; Bulfoni, M.; Avolio, E.; Battistella, A.; Lazzarino, M.; Cellot, A., et al. Heart failure impairs the mechanotransduction properties of human cardiac pericytes. *J Mol Cell Cardiol* **2020**, *151*, 15-30, doi:10.1016/j.yjmcc.2020.10.016.
19. Rolle, I.G.; Crivellari, I.; Zanello, A.; Mazzega, E.; Dalla, E.; Bulfoni, M.; Avolio, E.; Battistella, A.; Lazzarino, M.; Cellot, A., et al. Heart failure impairs the mechanotransduction propeties of human cardiac pericytes. *J Mol Cell Cardiol* **2020**, *151*, 15-30, doi:10.1016/j.yjmcc.2020.10.016.
20. Rolle, I.G.; Crivellari, I.; Caragnano, A.; Cervellin, C.; Aleksova, A.; Cesselli, D.; Beltrami, A.P. Cell Senescence in Cardiac Repair and Failure. *Curr Stem Cell Res Ther* **2020**, *15*, 685-695, doi:10.2174/1574888X15666200106144345.
21. Manini, I.; Caponnetto, F.; Dalla, E.; Ius, T.; Pepa, G.M.D.; Pegolo, E.; Bartolini, A.; Rocca, G.; Menna, G.; Loreto, C.D., et al. Heterogeneity Matters: Different Regions of Glioblastoma Are Characterized by Distinctive Tumor-Supporting Pathways. *Cancers (Basel)* **2020**, *12*, doi:10.3390/cancers12102960.
22. Manini, I.; Caponnetto, F.; Dalla, E.; Ius, T.; Della Pepa, G.M.; Pegolo, E.; Bartolini, A.; La Rocca, G.; Menna, G.; Di Loreto, C., et al. Heterogeneity Matters: Different Regions of Glioblastoma Are Characterized by Distinctive Tumor-Supporting Pathways. *Cancers (Basel)* **2020**, *12*, doi:10.3390/cancers12102960.
23. Li, X.; Spelat, R.; Bartolini, A.; Cesselli, D.; Ius, T.; Skrap, M.; Caponnetto, F.; Manini, I.; Yang, Y.; Torre, V. Mechanisms of malignancy in glioblastoma cells are linked to mitochondrial Ca(2) (+) uniporter upregulation and higher intracellular Ca(2+) levels. *J Cell Sci* **2020**, *133*, doi:10.1242/jcs.237503.
24. Li, X.; Spelat, R.; Bartolini, A.; Cesselli, D.; Ius, T.; Skrap, M.; Caponnetto, F.; Manini, I.; Yang, Y.; Torre, V. Mechanisms of malignancy in glioblastoma cells are linked to MCU upregulation and higher intracellular calcium level. *J Cell Sci* **2020**, 10.1242/jcs.237503, doi:10.1242/jcs.237503.
25. Ius, T.; Pauletto, G.; Tomasino, B.; Maieron, M.; Budai, R.; Isola, M.; Cesselli, D.; Lettieri, C.; Skrap, M. Predictors of Postoperative Seizure Outcome in Low Grade Glioma: From Volumetric Analysis to Molecular Stratification. *Cancers (Basel)* **2020**, *12*, doi:10.3390/cancers12020397.
26. Ius, T.; Cesselli, D.; Isola, M.; Pauletto, G.; Tomasino, B.; D'Auria, S.; Bagatto, D.; Pegolo, E.; Beltrami, A.P.; Loreto, C.D., et al. Incidental Low-Grade Gliomas: Single-Institution Management Based on Clinical, Surgical, and Molecular Data. *Neurosurgery* **2020**, *86*, 391-399, doi:10.1093/neuros/nyz114.
27. Guarracino, I.; Ius, T.; Pegolo, E.; Cesselli, D.; Skrap, M.; Tomasino, B. Multimodal Assessment Shows a Mostly Preserved Cognitive Status in Incidentally Discovered Low Grade Gliomas: A Single Institution Study. *Cancers (Basel)* **2020**, *12*, doi:10.3390/cancers12010156.
28. Gerratana, L.; Basile, D.; Toffoletto, B.; Bulfoni, M.; Zago, S.; Magini, A.; Lera, M.; Pelizzari, G.; Parisse, P.; Casalis, L., et al. Biologically driven cut-off definition of lymphocyte ratios in metastatic breast cancer and association with exosomal subpopulations and prognosis. *Sci Rep* **2020**, *10*, 7010, doi:10.1038/s41598-020-63291-2.
29. Caponnetto, F.; Manini, I.; Bulfoni, M.; Zingaretti, N.; Miotti, G.; Di Loreto, C.; Cesselli, D.; Mariuzzi, L.; Parodi, P.C. Human Adipose-Derived Stem Cells in Madelung's Disease: Morphological and Functional Characterization. *Cells* **2020**, *10*, doi:10.3390/cells10010044.
30. Caponnetto, F.; Dalla, E.; Mangoni, D.; Piazza, S.; Radovic, S.; Ius, T.; Skrap, M.; Di Loreto, C.; Beltrami, A.P.; Manini, I., et al. The miRNA Content of Exosomes Released from the Glioma Microenvironment Can Affect Malignant Progression. *Biomedicines* **2020**, *8*, doi:10.3390/biomedicines8120564.
31. Caccese, M.; Ius, T.; Simonelli, M.; Fassan, M.; Cesselli, D.; Dipasquale, A.; Cavallin, F.; Padovan, M.; Salvalaggio, A.; Gardiman, M.P., et al. Mismatch-Repair Protein Expression in High-Grade Gliomas: A Large Retrospective Multicenter Study. *Int J Mol Sci* **2020**, *21*, doi:10.3390/ijms21186716.

32. Brisotto, G.; Biscontin, E.; Rossi, E.; Bulfoni, M.; Piruska, A.; Spazzapan, S.; Poggiana, C.; Vidotto, R.; Steffan, A.; Colombatti, A., et al. Dysmetabolic Circulating Tumor Cells Are Prognostic in Metastatic Breast Cancer. *Cancers (Basel)* **2020**, *12*, doi:10.3390/cancers12041005.
33. Raimondi, M.; Cesselli, D.; Di Loreto, C.; La Marra, F.; Schneider, C.; Demarchi, F. USP1 (ubiquitin specific peptidase 1) targets ULK1 and regulates its cellular compartmentalization and autophagy. *Autophagy* **2019**, *15*, 613-630, doi:10.1080/15548627.2018.1535291.
34. Manini, I.; Ruaro, M.E.; Sgarra, R.; Bartolini, A.; Caponnetto, F.; Ius, T.; Skrap, M.; Di Loreto, C.; Beltrami, A.P.; Manfioletti, G., et al. Semaphorin-7A on Exosomes: A Promigratory Signal in the Glioma Microenvironment. *Cancers (Basel)* **2019**, *11*, doi:10.3390/cancers11060758.
35. Ius, T.; Cesselli, D.; Isola, M.; Pauletto, G.; Tomasino, B.; D'Auria, S.; Bagatto, D.; Pegolo, E.; Beltrami, A.P.; Loreto, C.D., et al. Incidental Low-Grade Gliomas: Single-Institution Management Based on Clinical, Surgical, and Molecular Data. *Neurosurgery* **2019**, 10.1093/neuros/nyz114, doi:10.1093/neuros/nyz114.
36. Gandolfo, S.; Bulfoni, M.; Fabro, C.; Russi, S.; Sansonno, D.; Di Loreto, C.; Cesselli, D.; De Vita, S. Thymic stromal lymphopoietin expression from benign lymphoproliferation to malignant B-cell lymphoma in primary Sjogren's syndrome. *Clin Exp Rheumatol* **2019**, *37 Suppl 118*, 55-64.
37. Cesselli, D.; Ius, T.; Isola, M.; Del Ben, F.; Da Col, G.; Bulfoni, M.; Turetta, M.; Pegolo, E.; Marzinotto, S.; Scott, C.A., et al. Application of an Artificial Intelligence Algorithm to Prognostically Stratify Grade II Gliomas. *Cancers (Basel)* **2019**, *12*, doi:10.3390/cancers12010050.
38. Caragnano, A.; Aleksova, A.; Bulfoni, M.; Cervellin, C.; Rolle, I.G.; Veneziano, C.; Barchiesi, A.; Mimmi, M.C.; Vascotto, C.; Finato, N., et al. Autophagy and Inflammasome Activation in Dilated Cardiomyopathy. *J Clin Med* **2019**, *8*, doi:10.3390/jcm8101519.
39. Turetta, M.; Bulfoni, M.; Brisotto, G.; Fasola, G.; Zanello, A.; Biscontin, E.; Mariuzzi, L.; Steffan, A.; Di Loreto, C.; Cesselli, D., et al. Assessment of the Mutational Status of NSCLC Using Hypermetabolic Circulating Tumor Cells. *Cancers (Basel)* **2018**, *10*, doi:10.3390/cancers10080270.
40. Turetta, M.; Ben, F.D.; Brisotto, G.; Biscontin, E.; Bulfoni, M.; Cesselli, D.; Colombatti, A.; Scoles, G.; Gigli, G.; Del Mercato, L.L. Emerging Technologies for Cancer Research: towards Personalized Medicine with Microfluidic Platforms and 3D Tumor Models. *Curr Med Chem* **2018**, 10.2174/0929867325666180605122633, doi:10.2174/0929867325666180605122633.
41. Manini, I.; Caponnetto, F.; Bartolini, A.; Ius, T.; Mariuzzi, L.; Di Loreto, C.; Beltrami, A.P.; Cesselli, D. Role of Microenvironment in Glioma Invasion: What We Learned from In Vitro Models. *Int J Mol Sci* **2018**, *19*, doi:10.3390/ijms19010147.
42. Ius, T.; Ciani, Y.; Ruaro, M.E.; Isola, M.; Sorrentino, M.; Bulfoni, M.; Candotti, V.; Correcig, C.; Bourkoula, E.; Manini, I., et al. An NF-kappaB signature predicts low-grade glioma prognosis: a precision medicine approach based on patient-derived stem cells. *Neuro Oncol* **2018**, *20*, 776-787, doi:10.1093/neuonc/nox234.
43. Ius, T.; Cesselli, D.; Isola, M.; Toniato, G.; Pauletto, G.; Sciacca, G.; Fabbro, S.; Pegolo, E.; Rizzato, S.; Beltrami, A.P., et al. Combining Clinical and Molecular Data to Predict the Benefits of Carmustine Wafers in Newly Diagnosed High-Grade Gliomas. *Curr Treat Options Neurol* **2018**, *20*, 3, doi:10.1007/s11940-018-0489-2.
44. Cesselli, D.; Parisse, P.; Aleksova, A.; Veneziano, C.; Cervellin, C.; Zanello, A.; Beltrami, A.P. Extracellular Vesicles: How Drug and Pathology Interfere With Their Biogenesis and Function. *Front Physiol* **2018**, *9*, 1394, doi:10.3389/fphys.2018.01394.
45. Cesselli, D.; Aleksova, A.; Mazzega, E.; Caragnano, A.; Beltrami, A.P. Cardiac stem cell aging and heart failure. *Pharmacol Res* **2018**, *127*, 26-32, doi:10.1016/j.phrs.2017.01.013.
46. Zeppieri, M.; Salvetat, M.L.; Beltrami, A.; Cesselli, D.; Russo, R.; Alcalde, I.; Merayo-Lloves, J.; Brusini, P.; Parodi, P.C. Adipose Derived Stem Cells for Corneal Wound Healing after Laser Induced Corneal Lesions in Mice. *J Clin Med* **2017**, *6*, doi:10.3390/jcm6120115.
47. Parisse, P.; Rago, I.; Ulloa Severino, L.; Perissinotto, F.; Ambrosetti, E.; Paoletti, P.; Ricci, M.; Beltrami, A.P.; Cesselli, D.; Casalis, L. Atomic force microscopy analysis of extracellular vesicles. *Eur Biophys J* **2017**, 10.1007/s00249-017-1252-4, doi:10.1007/s00249-017-1252-4.

48. Ius, T.; Ciani, Y.; Ruaro, M.E.; Isola, M.; Sorrentino, M.; Bulfoni, M.; Candotti, V.; Correcig, C.; Bourkoula, E.; Manini, I., et al. A NF-kappaB signature predicts low-grade glioma prognosis: a precision medicine approach based on patient-derived stem cells. *Neuro Oncol* **2017**, 10.1093/neuonc/nox234, doi:10.1093/neuonc/nox234.
49. Guadagno, E.; Vitiello, M.; Francesca, P.; Cali, G.; Caponnetto, F.; Cesselli, D.; Camorani, S.; Borrelli, G.; Califano, M.; Cappabianca, P., et al. PATZ1 is a new prognostic marker of glioblastoma associated with the stem-like phenotype and enriched in the proneural subtype. *Oncotarget* **2017**, *8*, 59282-59300, doi:10.18632/oncotarget.19546.
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