UNIVERSITY of OTAGO
Te Whare Wānanga o Otāgo
NEW ZEALAND

16 November 2020

[redacted]

[redacted]

I write in response to your Official Information Act request of 10 October 2020, which initially sought "[all] records in the possession, custody or control of the University of Otago's Department of Anatomy describing the isolation of any exosome, directly from a sample taken from a human patient, where the patient sample was not first combined with any other source of genetic material (i.e. monkey kidney cells aka vero cells; lung cells from a lung cancer patient)." You also specified in your request that you were using 'isolation' is the everyday sense of the word.

I corresponded with you about your request following scoping activities with the Department of Anatomy, and on 29 October 2020 you agreed to amend your request to a list of research papers meeting the descriptor of your [initial request], which had been accessed by the one research group in the University's Department of Anatomy which is working on human exosomes. As requested, I also confirm that the research group in question includes some staff who are involved in ongoing and unpublished research on exosomes in humans.

The University has decided to grant your amended request, and I supply to you as an attachment a list of 331 references which have been accessed by the relevant research group, and which relate to human exosome research. I note that the attached references may cover a wider scope than your request, but will include as a subset the relevant references in scope of that request.

I trust this information is helpful.

Kind regards

Chris Stoddart
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1. Godoy, Barczak, DeHoff, Srinivasan, Das, Erle, Laurent Comparison of miRNA profiling methods using synthetic miRNA pools and standardized exRNA samples reveals substantial performance differences. doi: 10.1101/645762
2. Abdel-Haq H. Blood exosomes as a tool for monitoring treatment efficacy and progression of neurodegenerative diseases. Neural regeneration research 2019;14(1):72.
3. Abner EL, Jicha GA, Shaw LM, et al. Plasma neuronal exosomal levels of Alzheimer's disease biomarkers in normal aging. Annals of Clinical and Translational Neurology, 2016.
4. Abner EL, Jicha GA, Shaw LM, et al. Plasma neuronal exosomal levels of Alzheimer's disease biomarkers in normal aging. Annals of Clinical and Translational Neurology 2016;3(5):399-403.
5. Alvarez-Erviti L, Seow Y, Schapira AH, et al. Lysosomal dysfunction increases exosome-mediated alpha-synuclein release and transmission. Neurobiology of Disease, 2011.
6. Alvarez-Erviti L, Seow Y, Yin H, et al. Delivery of siRNA to the mouse brain by systemic injection of targeted exosomes. Nature Biotechnology, 2011.
7. Amoah SK, Rodriguez BA, Logothetis CN, et al. Exosomal secretion of a psychosis-altered miRNA that regulates glutamate receptor expression is affected by antipsychotics. Neuropsychopharmacology, 2020.
8. An K, Klyubin I, Kim Y, et al. Exosomes neutralize synaptic-plasticity-disrupting activity of Aβ assemblies in vivo. Molecular Brain, 2013.
9. Armstrong D, Wildman DE. Extracellular Vesicles and the Promise of Continuous Liquid Biopsies. J Pathol Transl Med 2018;52(1):1-8. doi: 10.4132/jptm.2017.05.21 [published Online First: 2018/01/15]
10. Arroyo JD, Chevillet JR, Kroh EM, et al. Argonaute2 complexes carry a population of circulating microRNAs independent of vesicles in human plasma. Proc Natl Acad Sci U S A 2011;108(12):5003-08. doi: 10.1073/pnas.1019055108 [published Online First: 2011/03/07]
11. Asai H, Ikezu S, Tsunoda S, et al. Depletion of microglia and inhibition of exosome synthesis halt tau propagation. Nature Neuroscience, 2015.
12. Baietti MF, Zhang Z, Mortier E, et al. Syndecan-syntenin-ALIX regulates the biogenesis of exosomes. Nature Cell Biology, 2012.
13. Banack SA, Dunlop RA, Cox PA. An miRNA fingerprint using neural-enriched extracellular vesicles from blood plasma: towards a biomarker for amyotrophic lateral sclerosis/motor neuron disease. Open Biology 2020;10(6):200116. doi: 10.1098/rsob.200116
14. Baranyai T, Herczeg K, Onódi Z, et al. Isolation of exosomes from blood plasma: Qualitative and quantitative comparison of ultracentrifugation and size exclusion chromatography methods. PLoS One, 2015.
15. Bellingham SA, Coleman BM, Hill AF. Small RNA deep sequencing reveals a distinct miRNA signature released in exosomes from prion-infected neuronal cells. Nucleic acids research 2012;40(21):10937-49. doi: 10.1093/nar/gks832 [published Online First: 2012/09/10]
16. Bellingham SA, Guo BB, Coleman BM, et al. Exosomes: Vehicles for the transfer of toxic proteins associated with neurodegenerative diseases? Front Physiol, 2012.
17. Bellingham SA, Guo BB, Coleman BM, et al. Exosomes: vehicles for the transfer of toxic proteins associated with neurodegenerative diseases? Front Physiol 2012;3:124-24. doi: 10.3389/fphys.2012.00124
18. Bobrie A, Colombo M, Krumeich S, et al. Diverse subpopulations of vesicles secreted by different intracellular mechanisms are present in

exosome preparations obtained by differential ultracentrifugation. Journal of Extracellular Vesicles, 2012.
19. Böing AN, Van Der Pol E, Grootemaat AE, et al. Single-step isolation of extracellular vesicles by size-exclusion chromatography. Journal of Extracellular Vesicles 2014;3(1):23430. doi: 10.3402/jev.v3.23430
20. Bordas M, Genard G, Ohl S, et al. Optimized Protocol for Isolation of Small Extracellular Vesicles from Human and Murine Lymphoid Tissues. International journal of molecular sciences 2020;21(15):5586. doi: 10.3390/ijms21155586
21. Bosch S, De Beaurepaire L, Allard M, et al. Trehalose prevents aggregation of exosomes and cryodamage. Scientific Reports, 2016.
22. Bunggulawa EJ, Wang W, Yin T, et al. Recent advancements in the use of exosomes as drug delivery systems. J Nanobiotechnology 2018;16(1):81-81. doi: 10.1186/s12951-018-0403-9
23. Buschmann D, Kirchner B, Hermann S, et al. Evaluation of serum extracellular vesicle isolation methods for profiling miRNAs by next-generation sequencing. Journal of extracellular vesicles 2018;7(1):1481321-21. doi: 10.1080/20013078.2018.1481321
24. Cai S, Shi GS, Cheng HY, et al. Exosomal miR-7 mediates bystander autophagy in lung after focal brain irradiation in mice. International Journal of Biological Sciences, 2017.
25. Camacho L, Guerrero P, Marchetti D. MicroRNA and protein profiling of brain metastasis competent cell-derived exosomes. PLoS One 2013;8(9):e73790-e90. doi: 10.1371/journal.pone.0073790
26. Chaudhuri AD, Dastgheyb RM, Yoo SW, et al. TNFα and IL-1β modify the miRNA cargo of astrocyte shed extracellular vesicles to regulate neurotrophic signaling in neurons article. Cell Death and Disease, 2018.
27. Chávez ASO, O'Neal AJ, Santambrogio L, et al. Message in a vesicle – trans-kingdom intercommunication at the vector–host interface. Journal of Cell Science 2019;132(6):jcs224212. doi: 10.1242/jcs.224212
28. Cheng L, Doecke JD, Sharples RA, et al. Prognostic serum miRNA biomarkers associated with Alzheimer’s disease shows concordance with neuropsychological and neuroimaging assessment. Molecular Psychiatry 2015;20(10):1188-96. doi: 10.1038/mp.2014.127
29. Cheng L, Sharples RA, Scicluna BJ, et al. Exosomes provide a protective and enriched source of miRNA for biomarker profiling compared to intracellular and cell-free blood. Journal of Extracellular Vesicles 2014;3(1):23743. doi: 10.3402/jev.v3.23743
30. Cheng L, Vella LJ, Barnham KJ, et al. Small RNA fingerprinting of Alzheimer’s disease frontal cortex extracellular vesicles and their comparison with peripheral extracellular vesicles. Journal of Extracellular Vesicles 2020;9(1):1766822. doi: 10.1080/20013078.2020.1766822
31. Chernyshev VS, Rachamadugu R, Tseng YH, et al. Size and shape characterization of hydrated and desiccated exosomes. Analytical and Bioanalytical Chemistry, 2015.
32. Chiang C-Y, Chen C. Toward characterizing extracellular vesicles at a single-particle level. J Biomed Sci 2019;26(1):9-9. doi: 10.1186/s12929-019-0502-4
33. Chiarini A, Armato U, Gardenal E, et al. Amyloid β-exposed human astrocytes overproduce phospho-tau and overrelease it within exosomes, effects suppressed by calcilytic NPS 2143-Further implications for Alzheimer's therapy. Frontiers in Neuroscience, 2017.
34. Claßen L, Tykocinski LO, Wiedmann F, et al. Extracellular vesicles mediate intercellular communication: Transfer of functionally active microRNAs by microvesicles into phagocytes. European Journal of Immunology, 2017.

35. Clayton A, Buschmann D, Byrd JB, et al. Summary of the ISEV workshop on extracellular vesicles as disease biomarkers, held in Birmingham, UK, during December 2017. Journal of extracellular vesicles 2018;7(1):1473707-07. doi: 10.1080/20013078.2018.1473707
36. Coleman BM, Hanssen E, Lawson VA, et al. Prion-infected cells regulate the release of exosomes with distinct ultrastructural features. FASEB Journal, 2012.
37. Extracellular vesicles–Their role in the packaging and spread of misfolded proteins associated with neurodegenerative diseases. Seminars in cell & developmental biology; 2015. Elsevier.
38. Coumans FAW, Brisson AR, Buzas EI, et al. Methodological guidelines to study extracellular vesicles. Circulation Research, 2017.
39. Crescitelli R, Lässer C, Szabó TG, et al. Distinct RNA profiles in subpopulations of extracellular vesicles: Apoptotic bodies, microvesicles and exosomes. Journal of Extracellular Vesicles, 2013.
40. Cvjetkovic A, Lötvall J, Lässer C. The influence of rotor type and centrifugation time on the yield and purity of extracellular vesicles. Journal of Extracellular Vesicles, 2014.
41. D'Anca M, Fenoglio C, Serpente M, et al. Exosome Determinants of Physiological Aging and Age-Related Neurodegenerative Diseases. Frontiers in Aging Neuroscience 2019;11 doi: 10.3389/fnagi.2019.00232
42. Danzer KM, Kranich LR, Ruf WP, et al. Exosomal cell-to-cell transmission of alpha synuclein oligomers. Molecular Neurodegeneration, 2012.
43. Das S, Ansel KM, Bitzer M, et al. The Extracellular RNA Communication Consortium: Establishing Foundational Knowledge and Technologies for Extracellular RNA Research. Cell 2019;177(2):231-42. doi: 10.1016/j.cell.2019.03.023
44. de Godoy MA, Saraiva LM, de Carvalho LRP, et al. Mesenchymal stem cells and cell-derived extracellular vesicles protect hippocampal neurons from oxidative stress and synapse damage induced by amyloid- oligomers. Journal of Biological Chemistry, 2018.
45. De Toro J, Herschlik L, Waldner C, et al. Emerging Roles of Exosomes in Normal and Pathological Conditions: New Insights for Diagnosis and Therapeutic Applications. Frontiers in Immunology 2015;6 doi: 10.3389/fimmu.2015.00203
46. Delpech J-C, Herron S, Botros MB, et al. Neuroimmune Crosstalk through Extracellular Vesicles in Health and Disease. Trends in Neurosciences 2019;42(5):361-72. doi: https://doi.org/10.1016/j.tins.2019.02.007
47. Deng H, Sun C, Sun Y, et al. Lipid, protein, and microRNA composition within mesenchymal stem cell-derived exosomes. Cellular reprogramming 2018;20(3):178-86.
48. Deng M, Xiao H, Peng H, et al. Preservation of neuronal functions by exosomes derived from different human neural cell types under ischemic conditions. European Journal of Neuroscience, 2018.
49. Dickens AM, Tovar-Y-Romo LB, Yoo SW, et al. Astrocyte-shed extracellular vesicles regulate the peripheral leukocyte response to inflammatory brain lesions. Science Signaling, 2017.
50. Dinkins MB, Dasgupta S, Wang G, et al. Exosome reduction invivo is associated with lower amyloid plaque load in the 5XFAD mouse model of Alzheimer's disease. Neurobiology of Aging, 2014.
51. Ebrahimkhani S, Vafaee F, Hallal S, et al. Deep sequencing of circulating exosomal microRNA allows non-invasive glioblastoma diagnosis. NPJ Precis Oncol 2018;2:28-28. doi: 10.1038/s41698-018-0071-0
52. Ebrahimkhani S, Vafaee F, Young PE, et al. Exosomal microRNA signatures in multiple sclerosis reflect disease status. Scientific reports 2017;7(1):14293-93. doi: 10.1038/s41598-017-14301-3

53. Eitan E, Hutchison ER, Marosi K, et al. Extracellular vesicle-associated aβ mediates trans-neuronal bioenergetic and ca2+-handling deficits in alzheimer’s disease models. NPJ Aging Mech Dis, 2016.
54. Eitan E, Hutchison ER, Marosi K, et al. Extracellular Vesicle-Associated Aβ Mediates Trans-Neuronal Bioenergetic and Ca(2+)-Handling Deficits in Alzheimer's Disease Models. NPJ Aging Mech Dis 2016;2:16019. doi: 10.1038/npjamd.2016.19 [published Online First: 2016/09/22]
55. Eitan E, Zhang S, Witwer KW, et al. Extracellular vesicle-depleted fetal bovine and human sera have reduced capacity to support cell growth. Journal of Extracellular Vesicles, 2015.
56. Ekström K, Valadi H, Sjöstrand M, et al. Characterization of mRNA and microRNA in human mast cell-derived exosomes and their transfer to other mast cells and blood CD34 progenitor cells. Journal of Extracellular Vesicles, 2012.
57. EL Andaloussi S, Lakhal S, Mäger I, et al. Exosomes for targeted siRNA delivery across biological barriers. Advanced Drug Delivery Reviews, 2013.
58. Endzelinš E, Berger A, Melne V, et al. Detection of circulating miRNAs: Comparative analysis of extracellular vesicle-incorporated miRNAs and cell-free miRNAs in whole plasma of prostate cancer patients. BMC Cancer, 2017.
59. Escola JM, Kleijmeer MJ, Stoorvogel W, et al. Selective enrichment of tetraspan proteins on the internal vesicles of multivesicular endosomes and on exosomes secreted by human B-lymphocytes. Journal of Biological Chemistry, 1998.
60. Fang X, Duan Y, Adkins GB, et al. Highly Efficient Exosome Isolation and Protein Analysis by an Integrated Nanomaterial-Based Platform. Analytical chemistry 2018;90(4):2787-95. doi: 10.1021/acs.analchem.7b04861 [published Online First: 2018/02/08]
61. Fauré J, Lachenal G, Court M, et al. Exosomes are released by cultured cortical neurones. Molecular and Cellular Neuroscience, 2006.
62. Fernandes A, Ribeiro AR, Monteiro M, et al. Secretome from SH-SY5Y APPSwe cells trigger time-dependent CHME3 microglia activation phenotypes, ultimately leading to miR-21 exosome shuttling. Biochimie, 2018.
63. Fernando MR, Jiang C, Krzyzanowski GD, et al. New evidence that a large proportion of human blood plasma cell-free DNA is localized in exosomes. PLoS One 2017;12(8):e0183915-e15. doi: 10.1371/journal.pone.0183915
64. Fevrier B, Vilette D, Archer F, et al. Cells release prions in association with exosomes. Proc Natl Acad Sci U S A, 2004.
65. Fiandaca MS, Kapogiannis D, Mapstone M, et al. Identification of preclinical Alzheimer's disease by a profile of pathogenic proteins in neurally derived blood exosomes: A case-control study. Alzheimer's and Dementia, 2015.
66. Fiandaca MS, Kapogiannis D, Mapstone M, et al. Identification of preclinical Alzheimer's disease by a profile of pathogenic proteins in neurally derived blood exosomes: A case-control study. Alzheimers Dement 2015;11(6):600-7.e1. doi: 10.1016/j.jalz.2014.06.008 [published Online First: 2014/08/15]
67. Fiandaca MS, Mapstone ME, Cheema AK, et al. The critical need for defining preclinical biomarkers in Alzheimer's disease. Alzheimer's & Dementia 2014;10(3S):S196-S212. doi: 10.1016/j.jalz.2014.04.015
68. Fowler CD. NeuroEVs: Characterizing Extracellular Vesicles Generated in the Neural Domain. The Journal of Neuroscience 2019;39(47):9262-68. doi: 10.1523/jneurosci.0146-18.2019
69. Frühbeis C, Fröhlich D, Krämer-Albers EM. Emerging roles of exosomes in neuron-glia communication. Front Physiol, 2012.

70. Frühbeis C, Fröhlich D, Kuo WP, et al. Neurotransmitter-Triggered Transfer of Exosomes Mediates Oligodendrocyte-Neuron Communication. PLoS Biol, 2013.
71. Furi I, Momen-Heravi F, Szabo G. Extracellular vesicle isolation: present and future. Ann Transl Med 2017;5(12):263-63. doi: 10.21037/atm.2017.03.95
72. Galasko D. Expanding the Repertoire of Biomarkers for Alzheimer's Disease: Targeted and Non-targeted Approaches. Front Neurol 2015;6:256-56. doi: 10.3389/fneur.2015.00256
73. Gallart-Palau X, Serra A, Wong ASW, et al. Extracellular vesicles are rapidly purified from human plasma by PRotein Organic Solvent PRecipitation (PROSPR). Scientific reports 2015;5:14664-64. doi: 10.1038/srep14664
74. Gámez-Valero A, Campdelacreu J, Vilas D, et al. Exploratory study on microRNA profiles from plasma-derived extracellular vesicles in Alzheimer’s disease and dementia with Lewy bodies. Translational Neurodegeneration 2019;8(1):31. doi: 10.1186/s40035-019-0169-5
75. Garcia-Contreras M, Shah SH, Tamayo A, et al. Plasma-derived exosome characterization reveals a distinct microRNA signature in long duration Type 1 diabetes. Scientific Reports, 2017.
76. Gayen M, Bhomia M, Balakathiresan N, et al. Exosomal microRNAs released by activated astrocytes as potential neuroinflammatory biomarkers. International Journal of Molecular Sciences, 2020.
77. Ge Q, Zhou Y, Lu J, et al. miRNA in plasma exosome is stable under different storage conditions. Molecules 2014;19(2):1568-75. doi: 10.3390/molecules19021568
78. Ghai V, Wu X, Bheda-Malge A, et al. Genome-wide Profiling of Urinary Extracellular Vesicle microRNAs Associated With Diabetic Nephropathy in Type 1 Diabetes. Kidney International Reports 2018;3(3):555-72. doi: https://doi.org/10.1016/j.ekir.2017.11.019
79. Gholizadeh S, Shehata Draz M, Zarghooni M, et al. Microfluidic approaches for isolation, detection, and characterization of extracellular vesicles: Current status and future directions. Biosensors and Bioelectronics 2017;91:588-605. doi: https://doi.org/10.1016/j.bios.2016.12.062
80. Godoy PM, Bhakta NR, Barczak AJ, et al. Large Differences in Small RNA Composition Between Human Biofluids. Cell Reports 2018;25(5):1346-58. doi: https://doi.org/10.1016/j.celrep.2018.10.014
81. Goetzl EJ, Boxer A, Schwartz JB, et al. Low neural exosomal levels of cellular survival factors in Alzheimer's disease. Annals of Clinical and Translational Neurology, 2015.
82. Goetzl EJ, Boxer A, Schwartz JB, et al. Altered lysosomal proteins in neural-derived plasma exosomes in preclinical Alzheimer disease. Neurology, 2015.
83. Goetzl EJ, Elahi FM, Mustapic M, et al. Altered levels of plasma neuron-derived exosomes and their cargo proteins characterize acute and chronic mild traumatic brain injury. FASEB J 2019;33(4):5082-88. doi: 10.1096/fj.201802319R [published Online First: 2019/01/03]
84. Goetzl EJ, Kapogiannis D, Schwartz JB, et al. Decreased synaptic proteins in neuronal exosomes of frontotemporal dementia and Alzheimer's disease. FASEB J 2016;30(12):4141-48. doi: 10.1096/fj.201600816R [published Online First: 2016/09/06]
85. Goetzl EJ, Ledreux A, Granholm A-C, et al. Neuron-Derived Exosome Proteins May Contribute to Progression From Repetitive Mild Traumatic Brain Injuries to Chronic Traumatic Encephalopathy. Frontiers in neuroscience 2019;13:452-52. doi: 10.3389/fnins.2019.00452
86. Goetzl EJ, Mustapic M, Kapogiannis D, et al. Cargo proteins of plasma astrocyte-derived exosomes in Alzheimer's disease. FASEB Journal, 2016.

87. Goetzl EJ, Peltz CB, Mustapic M, et al. Neuron-Derived Plasma Exosome Proteins after Remote Traumatic Brain Injury. Journal of Neurotrauma 2019;37(2):382-88. doi: 10.1089/neu.2019.6711
88. Goldie BJ, Dun MD, Lin M, et al. Activity-associated miRNA are packaged in Map1b-enriched exosomes released from depolarized neurons. Nucleic Acids Research, 2014.
89. Gong M, Yu B, Wang J, et al. Mesenchymal stem cells release exosomes that transfer miRNAs to endothelial cells and promote angiogenesis. Oncotarget, 2017.
90. Gould SJ, Raposo G. As we wait: Coping with an imperfect nomenclature for extracellular vesicles. Journal of Extracellular Vesicles, 2013.
91. Gould SJ, Raposo G. As we wait: coping with an imperfect nomenclature for extracellular vesicles. Journal of Extracellular Vesicles 2013;2(1):20389. doi: 10.3402/jev.v2i0.20389
92. Greening DW, Xu R, Gopal SK, et al. Proteomic insights into extracellular vesicle biology – defining exosomes and shed microvesicles. Expert Review of Proteomics 2017;14(1):69-95. doi: 10.1080/14789450.2017.1260450
93. Greening DW, Xu R, Ji H, et al. A protocol for exosome isolation and characterization: Evaluation of ultracentrifugation, density-gradient separation, and immunoaffinity capture methods, 2015.
94. Gui Y, Liu H, Zhang L, et al. Altered microRNA profiles in cerebrospinal fluid exosome in Parkinson disease and Alzheimer disease. Oncotarget 2015;6(35):37043-53. doi: 10.18632/oncotarget.6158
95. Gui YX, Liu H, Zhang LS, et al. Altered microRNA profiles in cerebrospinal fluid exosome in Parkinson disease and Alzheimer disease. Oncotarget, 2015.
96. Guitart K, Loers G, Buck F, et al. Improvement of neuronal cell survival by astrocyte-derived exosomes under hypoxic and ischemic conditions depends on prion protein. GLIA, 2016.
97. Guix F, Corbett G, Cha D, et al. Detection of Aggregation-Competent Tau in Neuron-Derived Extracellular Vesicles. International Journal of Molecular Sciences 2018;19(3):663. doi: 10.3390/ijms19030663
98. H Rashed M, Bayraktar E, K Helal G, et al. Exosomes: from garbage bins to promising therapeutic targets. International journal of molecular sciences 2017;18(3):538.
99. Hamlett ED, Goetzl EJ, Ledreux A, et al. Neuronal exosomes reveal Alzheimer's disease biomarkers in Down syndrome. Alzheimers Dement 2017;13(5):541-49. doi: 10.1016/j.jalz.2016.08.012 [published Online First: 2016/10/15]
100. Hampel H, Goetzl EJ, Kapogiannis D, et al. Biomarker-Drug and Liquid Biopsy Co-development for Disease Staging and Targeted Therapy: Cornerstones for Alzheimer's Precision Medicine and Pharmacology. Front Pharmacol 2019;10:310-10. doi: 10.3389/fphar.2019.00310
101. Hardin H, Helein H, Meyer K, et al. Thyroid cancer stem-like cell exosomes: regulation of EMT via transfer of lncRNAs. Lab Invest 2018;98(9):1133-42. doi: 10.1038/s41374-018-0065-0 [published Online First: 2018/07/02]
102. Harding C, Heuser J, Stahl P. Receptor-mediated endocytosis of transferrin and recycling of the transferrin receptor in rat reticulocytes. J Cell Biol, 1983.
103. Harischandra DS, Ghaisas S, Rokad D, et al. Environmental neurotoxicant manganese regulates exosome-mediated extracellular miRNAs in cell culture model of Parkinson's disease: Relevance to α-synuclein misfolding in metal neurotoxicity. NeuroToxicology, 2018.
104. Hartjes TA, Mytnyk S, Jenster GW, et al. Extracellular Vesicle Quantification and Characterization: Common Methods and Emerging

Approaches. Bioengineering (Basel) 2019;6(1):7. doi: 10.3390/bioengineering6010007
105. Hartmann A, Muth C, Dabrowski O, et al. Exosomes and the prion protein: More than one truth. Frontiers in Neuroscience, 2017.
106. Helwa I, Cai J, Drewry MD, et al. A comparative study of serum exosome isolation using differential ultracentrifugation and three commercial reagents. PLoS One, 2017.
107. Helwa I, Cai J, Drewry MD, et al. A Comparative Study of Serum Exosome Isolation Using Differential Ultracentrifugation and Three Commercial Reagents. PLoS One 2017;12(1):e0170628-e28. doi: 10.1371/journal.pone.0170628
108. Hessvik NP, Llorente A. Current knowledge on exosome biogenesis and release. Cell Mol Life Sci 2018;75(2):193-208. doi: 10.1007/s00018-017-2595-9 [published Online First: 2017/07/21]
109. Hira K, Ueno Y, Tanaka R, et al. Astrocyte-derived exosomes treated with a semaphorin 3A inhibitor enhance stroke recovery via prostaglandin D2 synthase. Stroke, 2018.
110. Holm MM, Kaiser J, Schwab ME. Extracellular Vesicles: Multimodal Envoys in Neural Maintenance and Repair. Trends in Neurosciences, 2018.
111. Hong C-S, Funk S, Muller L, et al. Isolation of biologically active and morphologically intact exosomes from plasma of patients with cancer. Journal of extracellular vesicles 2016;5:29289-89. doi: 10.3402/jev.v5.29289
112. Horibe S, Tanahashi T, Kawauchi S, et al. Mechanism of recipient cell-dependent differences in exosome uptake. BMC Cancer, 2018.
113. Howitt J, Hill AF. Exosomes in the pathology of neurodegenerative diseases. Journal of Biological Chemistry, 2016.
114. Howitt J, Hill AF. Exosomes in the Pathology of Neurodegenerative Diseases. J Biol Chem 2016;291(52):26589-97. doi: 10.1074/jbc.R116.757955 [published Online First: 2016/11/16]
115. Hu G, Niu F, Liao K, et al. HIV-1 Tat-Induced Astrocytic Extracellular Vesicle miR-7 Impairs Synaptic Architecture. Journal of Neuroimmune Pharmacology, 2020.
116. Hu G, Yao H, Chaudhuri AD, et al. Exosome-mediated shuttling of microRNA-29 regulates HIV Tat and morphine-mediated Neuronal dysfunction. Cell Death and Disease, 2012.
117. Iliescu FS, Vrtačnik D, Neuzil P, et al. Microfluidic Technology for Clinical Applications of Exosomes. Micromachines (Basel) 2019;10(6):392. doi: 10.3390/mi10060392
118. Ipas H, Guttin A, Issartel J-P. Exosomal MicroRNAs in Tumoral U87 MG Versus Normal Astrocyte Cells. MicroRNA, 2015.
119. Iranifar E, Seresht BM, Momeni F, et al. Exosomes and microRNAs: new potential therapeutic candidates in Alzheimer disease therapy. Journal of cellular physiology 2019;234(3):2296-305.
120. Ittner A, Ittner LM. Dendritic Tau in Alzheimer’s Disease. Neuron 2018;99(1):13-27. doi: 10.1016/j.neuron.2018.06.003
121. Jan AT, Malik MA, Rahman S, et al. Perspective Insights of Exosomes in Neurodegenerative Diseases: A Critical Appraisal. Frontiers in aging neuroscience 2017;9:317-17. doi: 10.3389/fnagi.2017.00317
122. Janas AM, Sapoń K, Janas T, et al. Exosomes and other extracellular vesicles in neural cells and neurodegenerative diseases. Biochimica et Biophysica Acta (BBA) - Biomembranes 2016;1858(6):1139-51. doi: 10.1016/j.bbamem.2016.02.011
123. Jarmalavičiūtė A, Pivoriūnas A. Exosomes as a potential novel therapeutic tools against neurodegenerative diseases. Pharmacological Research 2016;113:816-22. doi: 10.1016/j.phrs.2016.02.002
124. Jeppesen DK, Fenix AM, Franklin JL, et al. Reassessment of Exosome Composition. Cell, 2019.

125. Johnstone RM. Exosomes biological significance: A concise review. Blood Cells, Molecules, and Diseases 2006;36(2):315-21. doi: 10.1016/j.bcmd.2005.12.001
126. Jovičić A, Gitler AD. Distinct repertoires of microRNAs present in mouse astrocytes compared to astrocytesecreted exosomes. PLoS One, 2017.
127. Kalani A, Tyagi A, Tyagi N. Exosomes: mediators of neurodegeneration, neuroprotection and therapeutics. Mol Neurobiol 2014;49(1):590-600. doi: 10.1007/s12035-013-8544-1 [published Online First: 2013/09/03]
128. Kalra H, Adda CG, Liem M, et al. Comparative proteomics evaluation of plasma exosome isolation techniques and assessment of the stability of exosomes in normal human blood plasma. PROTEOMICS 2013;13(22):3354-64. doi: 10.1002/pmic.201300282
129. Kalra H, Adda CG, Liem M, et al. Comparative proteomics evaluation of plasma exosome isolation techniques and assessment of the stability of exosomes in normal human blood plasma. Proteomics, 2013.
130. Kapogiannis D, Boxer A, Schwartz JB, et al. Dysfunctionally phosphorylated type 1 insulin receptor substrate in neural-derived blood exosomes of preclinical Alzheimer's disease. FASEB Journal, 2015.
131. Kapogiannis D, Boxer A, Schwartz JB, et al. Dysfunctionally phosphorylated type 1 insulin receptor substrate in neural-derived blood exosomes of preclinical Alzheimer's disease. FASEB J 2015;29(2):589-96. doi: 10.1096/fj.14-262048 [published Online First: 2014/10/23]
132. Kapogiannis D, Mustapic M, Shardell MD, et al. Association of Extracellular Vesicle Biomarkers With Alzheimer Disease in the Baltimore Longitudinal Study of Aging. JAMA Neurology 2019;76(11):1340-51. doi: 10.1001/jamaneurol.2019.2462
133. Karimi N, Cvjetkovic A, Jang SC, et al. Detailed analysis of the plasma extracellular vesicle proteome after separation from lipoproteins. Cellular and Molecular Life Sciences 2018;75(15):2873-86. doi: 10.1007/s00018-018-2773-4
134. Katsu M, Hama Y, Utsumi J, et al. MicroRNA expression profiles of neuron-derived extracellular vesicles in plasma from patients with amyotrophic lateral sclerosis. Neuroscience Letters 2019;708:134176. doi: 10.1016/j.neulet.2019.03.048
135. Keerthikumar S, Gangoda L, Liem M, et al. Proteogenomic analysis reveals exosomes are more oncogenic than ectosomes. Oncotarget, 2015.
136. Koles K, Nunnari J, Korkut C, et al. Mechanism of evenness interrupted (Evi)-exosome release at synaptic boutons. J Biol Chem 2012;287(20):16820-34. doi: 10.1074/jbc.M112.342667 [published Online First: 2012/03/21]
137. Korkut C, Li Y, Koles K, et al. Regulation of postsynaptic retrograde signaling by presynaptic exosome release. Neuron 2013;77(6):1039-46. doi: 10.1016/j.neuron.2013.01.013
138. Kowal EJK, Ter-Ovanesyan D, Regev A, et al. Extracellular Vesicle Isolation and Analysis by Western Blotting. Methods in molecular biology (Clifton, NJ), 2017.
139. Kowal J, Arras G, Colombo M, et al. Proteomic comparison defines novel markers to characterize heterogeneous populations of extracellular vesicle subtypes. Proc Natl Acad Sci U S A, 2016.
140. Krämer-Albers EM. Ticket to Ride: Targeting Proteins to Exosomes for Brain Delivery. Molecular Therapy, 2017.
141. Krämer-Albers EM, Hill AF. Extracellular vesicles: interneural shuttles of complex messages. Current Opinion in Neurobiology, 2016.
142. Lachenal G, Pernet-Gallay K, Chivet M, et al. Release of exosomes from differentiated neurons and its regulation by synaptic glutamatergic activity. Molecular and Cellular Neuroscience, 2011.

143. Lafourcade C, Ramírez JP, Luarte A, et al. MiRNAs in astrocyte-derived exosomes as possible mediators of neuronal plasticity. Journal of Experimental Neuroscience, 2016.
144. Lakshmi S, Essa MM, Hartman RE, et al. Exosomes in Alzheimer's Disease: Potential Role as Pathological Mediators, Biomarkers and Therapeutic Targets. Neurochemical Research 2020;45(11):2553-59. doi: 10.1007/s11064-020-03111-1
145. Lässer C. Mapping Extracellular RNA Sheds Lights on Distinct Carriers. Cell 2019;177(2):228-30. doi: 10.1016/j.cell.2019.03.027
146. Lässer C, Seyed Alikhani V, Ekström K, et al. Human saliva, plasma and breast milk exosomes contain RNA: uptake by macrophages. Journal of Translational Medicine 2011;9(1):9. doi: 10.1186/1479-5876-9-9
147. Lee S, Mankhong S, Kang J-H. Extracellular Vesicle as a Source of Alzheimer's Biomarkers: Opportunities and Challenges. International journal of molecular sciences 2019;20(7):1728. doi: 10.3390/ijms20071728
148. Lee SH, Shin SM, Zhong P, et al. Reciprocal control of excitatory synapse numbers by Wnt and Wnt inhibitor PRR7 secreted on exosomes. Nature communications 2018;9(1):3434-34. doi: 10.1038/s41467-018-05858-2
149. Lefebvre FA, Lécuyer E. Small Luggage for a Long Journey: Transfer of Vesicle-Enclosed Small RNA in Interspecies Communication. 2017;8 doi: 10.3389/fmicb.2017.00377
150. Levy E. Exosomes in the diseased brain: First insights from in vivo studies. Frontiers in Neuroscience, 2017.
151. Li M, Zeringer E, Barta T, et al. Analysis of the RNA content of the exosomes derived from blood serum and urine and its potential as biomarkers. Philos Trans R Soc Lond B Biol Sci 2014;369(1652):20130502. doi: 10.1098/rstb.2013.0502
152. Li P, Kaslan M, Lee SH, et al. Progress in Exosome Isolation Techniques. Theranostics 2017;7(3):789-804. doi: 10.7150/thno.18133
153. Li Y, Zhang L, Liu F, et al. Identification of endogenous controls for analyzing serum exosomal miRNA in patients with hepatitis B or hepatocellular carcinoma. Disease Markers, 2015.
154. Liao Z, Jaular LM, Soueidi E, et al. Acetylcholinesterase is not a generic marker of extracellular vesicles. Journal of Extracellular Vesicles, 2019.
155. Liu C, Kannisto E, Yu G, et al. Non-invasive Detection of Exosomal MicroRNAs via Tethered Cationic Lipoplex Nanoparticles (tCLN) Biochip for Lung Cancer Early Detection. Front Genet 2020;11:258-58. doi: 10.3389/fgene.2020.00258
156. Liu CG, Song J, Zhang YQ, et al. MicroRNA-193b is a regulator of amyloid precursor protein in the blood and cerebrospinal fluid derived exosomal microRNA-193b is a biomarker of Alzheimer's disease. Molecular Medicine Reports, 2014.
157. Liu W, Bai X, Zhang A, et al. Role of Exosomes in Central Nervous System Diseases. Frontiers in molecular neuroscience 2019;12:240-40. doi: 10.3389/fnmol.2019.00240
158. Livshts MA, Khomyakova E, Evtushenko EG, et al. Isolation of exosomes by differential centrifugation: Theoretical analysis of a commonly used protocol. Scientific Reports, 2015.
159. Lobb RJ, Becker M, Wen SW, et al. Optimized exosome isolation protocol for cell culture supernatant and human plasma. Journal of extracellular vesicles 2015;4:27031-31. doi: 10.3402/jev.v4.27031
160. Lötvall J, Hill AF, Hochberg F, et al. Minimal experimental requirements for definition of extracellular vesicles and their functions: A position statement from the International Society for Extracellular Vesicles. Journal of Extracellular Vesicles, 2014.

161. Luarte A, Cisternas P, Caviedes A, et al. Astrocytes at the Hub of the Stress Response: Potential Modulation of Neurogenesis by miRNAs in Astrocyte-Derived Exosomes. Stem Cells International, 2017.
162. Lugli G, Cohen AM, Bennett DA, et al. Plasma exosomal miRNAs in persons with and without Alzheimer disease: Altered expression and prospects for biomarkers. PLoS One, 2015.
163. Lugli G, Cohen AM, Bennett DA, et al. Plasma Exosomal miRNAs in Persons with and without Alzheimer Disease: Altered Expression and Prospects for Biomarkers. PLoS One 2015;10(10):e0139233. doi: 10.1371/journal.pone.0139233
164. Maas SLN, Breakefield XO, Weaver AM. Extracellular Vesicles: Unique Intercellular Delivery Vehicles. Trends in cell biology 2017;27(3):172-88. doi: 10.1016/j.tcb.2016.11.003 [published Online First: 2016/12/13]
165. Maas SLN, Broekman MLD, de Vrij J. Tunable resistive pulse sensing for the characterization of extracellular vesicles. Methods in Molecular Biology, 2017.
166. Maas SLN, Vrij JD, Broekman MLD. Quantification and size-profiling of extracellular vesicles using tunable resistive pulse sensing. Journal of Visualized Experiments, 2014.
167. Malm T, Loppi S, Kanninen KM. Exosomes in Alzheimer's disease. Neurochemistry international 2016;97:193-99.
168. Marcoux G, Duchez A-C, Cloutier N, et al. Revealing the diversity of extracellular vesicles using high-dimensional flow cytometry analyses. Scientific reports 2016;6:35928-28. doi: 10.1038/srep35928
169. Margolis L, Sadovsky Y. The biology of extracellular vesicles: The known unknowns. PLoS Biol 2019;17(7):e3000363-e63. doi: 10.1371/journal.pbio.3000363
170. Mateescu B, Kowal EJK, Van Balkom BWM, et al. Obstacles and opportunities in the functional analysis of extracellular vesicle RNA – an ISEV position paper. Journal of Extracellular Vesicles 2017;6(1):1286095. doi: 10.1080/20013078.2017.1286095
171. Mathews PM, Levy E. Exosome Production Is Key to Neuronal Endosomal Pathway Integrity in Neurodegenerative Diseases. Frontiers in neuroscience 2019;13:1347-47. doi: 10.3389/fnins.2019.01347
172. Mathieu M, Martin-Jaular L, Lavieu G, et al. Specificities of secretion and uptake of exosomes and other extracellular vesicles for cell-to-cell communication. Nature Cell Biology 2019;21(1):9-17. doi: 10.1038/s41556-018-0250-9
173. Mathivanan S, Lim JWE, Tauro BJ, et al. Proteomics analysis of A33 immunoaffinity-purified exosomes released from the human colon tumor cell line LIM1215 reveals a tissue-specific protein signature. Molecular and Cellular Proteomics, 2010.
174. Matsumoto A, Takahashi Y, Chang H-Y, et al. Blood concentrations of small extracellular vesicles are determined by a balance between abundant secretion and rapid clearance. Journal of extracellular vesicles 2019;9(1):1696517-17. doi: 10.1080/20013078.2019.1696517
175. Max KEA, Bertram K, Akat KM, et al. Human plasma and serum extracellular small RNA reference profiles and their clinical utility. Proc Natl Acad Sci U S A 2018;115(23):E5334-E43. doi: 10.1073/pnas.1714397115 [published Online First: 2018/05/18]
176. Mehdiani A, Maier A, Pinto A, et al. An innovative method for exosome quantification and size measurement. J Vis Exp 2015(95):50974-74. doi: 10.3791/50974
177. Meldolesi J. Exosomes and Ectosomes in Intercellular Communication. Current Biology 2018;28(8):R435-R44. doi: https://doi.org/10.1016/j.cub.2018.01.059
178. Melo SA, Luecke LB, Kahlert C, et al. Glypican-1 identifies cancer exosomes and detects early pancreatic cancer. Nature, 2015.

179. Men Y, Yelick J, Jin S, et al. Exosome reporter mice reveal the involvement of exosomes in mediating neuron to astroglia communication in the CNS. Nat Commun. 2019/09/14 ed, 2019:4136.
180. Mihály J, Deák R, Szigyártó IC, et al. Characterization of extracellular vesicles by IR spectroscopy: Fast and simple classification based on amide and CH stretching vibrations. Biochimica et Biophysica Acta (BBA) - Biomembranes 2017;1859(3):459-66. doi: https://doi.org/10.1016/j.bbamem.2016.12.005
181. Misra A, Chakrabarti SS, Gambhir IS. New genetic players in late-onset Alzheimer's disease: Findings of genome-wide association studies. Indian J Med Res 2018;148(2):135-44. doi: 10.4103/ijmr.IJMR_473_17
182. Mitsuhashi M, Taub DD, Kapogiannis D, et al. Aging enhances release of exosomal cytokine mRNAs by Aβ1-42-stimulated macrophages. FASEB J 2013;27(12):5141-50. doi: 10.1096/fj.13-238980 [published Online First: 2013/09/06]
183. Momen-Heravi F, Balaj L, Alian S, et al. Alternative methods for characterization of extracellular vesicles. Front Physiol, 2012.
184. Montecalvo A, Larregina AT, Shufesky WJ, et al. Mechanism of transfer of functional microRNAs between mouse dendritic cells via exosomes. Blood 2012;119(3):756-66. doi: 10.1182/blood-2011-02-338004 [published Online First: 2011/10/26]
185. Morel L, Regan M, Higashimori H, et al. Neuronal exosomal miRNA-dependent translational regulation of astroglial glutamate transporter GLT1. J Biol Chem. 2013/02/01 ed, 2013:7105-16.
186. Muhsin-Sharafaldine MR, Saunderson SC, Dunn AC, et al. Procoagulant and immunogenic properties of melanoma exosomes, microvesicles and apoptotic vesicles. Oncotarget, 2016.
187. Mulcahy LA, Pink RC, Carter DRF. Routes and mechanisms of extracellular vesicle uptake. Journal of Extracellular Vesicles, 2014.
188. Muller L, Hong C-S, Stolz DB, et al. Isolation of biologically-active exosomes from human plasma. Journal of Immunological Methods 2014;411:55-65. doi: 10.1016/j.jim.2014.06.007
189. Murillo OD, Thistlethwaite W, Rozowsky J, et al. exRNA Atlas Analysis Reveals Distinct Extracellular RNA Cargo Types and Their Carriers Present across Human Biofluids. Cell 2019;177(2):463-77.e15. doi: 10.1016/j.cell.2019.02.018
190. Mustapic M, Eitan E, Werner JK, et al. Plasma Extracellular Vesicles Enriched for Neuronal Origin: A Potential Window into Brain Pathologic Processes. Frontiers in Neuroscience 2017;11 doi: 10.3389/fnins.2017.00278
191. Narayanan R, Huang CC, Ravindran S. Hijacking the Cellular Mail: Exosome Mediated Differentiation of Mesenchymal Stem Cells. Stem Cells International, 2016.
192. Nath S, Agholme L, Kurudenkandy FR, et al. Spreading of Neurodegenerative Pathology via Neuron-to-Neuron Transmission of β-Amyloid. The Journal of Neuroscience 2012;32(26):8767. doi: 10.1523/JNEUROSCI.0615-12.2012
193. Nigita G, Distefano R, Veneziano D, et al. Tissue and exosomal miRNA editing in Non-Small Cell Lung Cancer. Scientific reports 2018;8(1):10222-22. doi: 10.1038/s41598-018-28528-1
194. Nikitidou E, Khoonsari PE, Shevchenko G, et al. Increased release of Apolipoprotein E in extracellular vesicles following amyloid-β protofibril exposure of neuroglial co-cultures. Journal of Alzheimer's Disease, 2017.
195. Pan BT, Teng K, Wu C, et al. Electron microscopic evidence for externalization of the transferrin receptor in vesicular form in sheep reticulocytes. Journal of Cell Biology, 1985.

196. Panagopoulou MS, Wark AW, Birch DJS, et al. Phenotypic analysis of extracellular vesicles: a review on the applications of fluorescence. Journal of Extracellular Vesicles 2020;9(1):1710020. doi: 10.1080/20013078.2019.1710020
197. Pathan M, Fonseka P, Chitti SV, et al. Vesiclepedia 2019: a compendium of RNA, proteins, lipids and metabolites in extracellular vesicles. Nucleic acids research 2019;47(D1):D516-D19. doi: 10.1093/nar/gky1029
198. Patterson SA, Deep G, Brinkley TE. Detection of the receptor for advanced glycation endproducts in neuronally-derived exosomes in plasma. Biochemical and Biophysical Research Communications 2018;500(4):892-96. doi: https://doi.org/10.1016/j.bbrc.2018.04.181
199. Pegtel DM, Peferoen L, Amor S. Extracellular vesicles as modulators of cell-to-cell communication in the healthy and diseased brain. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014.
200. Pérez-Boza J, Lion M, Struman I. Exploring the RNA landscape of endothelial exosomes. RNA 2018;24(3):423-35. doi: 10.1261/rna.064352.117 [published Online First: 2017/12/27]
201. Perez-Gonzalez R, Gauthier SA, Kumar A, et al. The exosome secretory pathway transports amyloid precursor protein carboxyl-terminal fragments from the cell into the brain extracellular space. Journal of Biological Chemistry, 2012.
202. Perez-Gonzalez R, Gauthier SA, Kumar A, et al. The exosome secretory pathway transports amyloid precursor protein carboxyl-terminal fragments from the cell into the brain extracellular space. Journal of Biological Chemistry 2012;287(51):43108-15.
203. Pluchino S, Smith JA. Explicating Exosomes: Reclassifying the Rising Stars of Intercellular Communication. Cell 2019;177(2):225-27. doi: https://doi.org/10.1016/j.cell.2019.03.020
204. Pluta R, Ułamek-Kozioł M, Januszewski S, et al. Exosomes as possible spread factor and potential biomarkers in Alzheimer's disease: current concepts. Biomarkers in Medicine 2018;12(9):1025-33. doi: 10.2217/bmm-2018-0034
205. Polanco JC, Li C, Durisic N, et al. Exosomes taken up by neurons hijack the endosomal pathway to spread to interconnected neurons. Acta neuropathologica communications, 2018.
206. Polanco JC, Scicluna BJ, Hill AF, et al. Extracellular Vesicles Isolated from the Brains of rTg4510 Mice Seed Tau Protein Aggregation in a Threshold-dependent Manner. J Biol Chem 2016;291(24):12445-66. doi: 10.1074/jbc.M115.709485 [published Online First: 2016/03/30]
207. Properzi F, Logozzi M, Fais S. Exosomes: the future of biomarkers in medicine. Biomarkers in medicine 2013;7(5):769-78.
208. Pulliam L, Sun B, Mustapic M, et al. Plasma neuronal exosomes serve as biomarkers of cognitive impairment in HIV infection and Alzheimer’s disease. Journal of neurovirology 2019;25(5):702-09.
209. Putz U, Howitt J, Lackovic J, et al. Nedd4 family-interacting protein 1 (Ndfip1) is required for the exosomal secretion of Nedd4 family proteins. Journal of Biological Chemistry, 2008.
210. Quek C, Hill AF. The role of extracellular vesicles in neurodegenerative diseases. Biochemical and biophysical research communications 2017;483(4):1178-86.
211. Quinn JP, Corbett NJ, Kellett KA, et al. Tau proteolysis in the pathogenesis of tauopathies: neurotoxic fragments and novel biomarkers. Journal of Alzheimer's Disease 2018;63(1):13-33.
212. Raffo-Romero A, Arab T, Al-Amri IS, et al. Medicinal Leech CNS as a model for exosome studies in the crosstalk between microglia and neurons. International Journal of Molecular Sciences 2018;19(12):4124.

213. Ragni E, Perucca Orfei C, De Luca P, et al. Identification of miRNA Reference Genes in Extracellular Vesicles from Adipose Derived Mesenchymal Stem Cells for Studying Osteoarthritis. International journal of molecular sciences 2019;20(5):1108. doi: 10.3390/ijms20051108
214. Rajendran L, Honsho M, Zahn TR, et al. Alzheimer's disease beta-amyloid peptides are released in association with exosomes. Proc Natl Acad Sci U S A 2006;103(30):11172-77. doi: 10.1073/pnas.0603838103 [published Online First: 2006/07/12]
215. Ramachandran S, Palanisamy V. Horizontal transfer of RNAs: exosomes as mediators of intercellular communication. Wiley Interdisciplinary Reviews: RNA 2012;3(2):286-93.
216. Raposo G, Stoorvogel W. Extracellular vesicles: Exosomes, microvesicles, and friends. Journal of Cell Biology, 2013.
217. Reiner AT, Witwer KW, Van Balkom BWM, et al. Concise review: Developing best-practice models for the therapeutic use of extracellular vesicles. Stem Cells Translational Medicine, 2017.
218. Revenfeld ALS, Bæk R, Nielsen MH, et al. Diagnostic and Prognostic Potential of Extracellular Vesicles in Peripheral Blood. Clinical Therapeutics 2014;36(6):830-46. doi: 10.1016/j.clinthera.2014.05.008
219. Riancho J, Vázquez-Higuera JL, Pozueta A, et al. MicroRNA Profile in Patients with Alzheimer's Disease: Analysis of miR-9-5p and miR-598 in Raw and Exosome Enriched Cerebrospinal Fluid Samples. Journal of Alzheimer's disease : JAD, 2017.
220. Rider MA, Hurwitz SN, Meckes DG. ExtraPEG: A polyethylene glycol-based method for enrichment of extracellular vesicles. Scientific Reports, 2016.
221. Risha Y, Minic Z, Ghobadloo SM, et al. The proteomic analysis of breast cell line exosomes reveals disease patterns and potential biomarkers. Scientific Reports 2020;10(1) doi: 10.1038/s41598-020-70393-4
222. Rodosthenous RS, Hutchins E, Reiman R, et al. Profiling Extracellular Long RNA Transcriptome in Human Plasma and Extracellular Vesicles for Biomarker Discovery. iScience 2020;23(6):101182. doi: 10.1016/j.isci.2020.101182
223. Rody WJ, Jr., Chamberlain CA, Emory-Carter AK, et al. The proteome of extracellular vesicles released by clastic cells differs based on their substrate. PLoS One 2019;14(7):e0219602-e02. doi: 10.1371/journal.pone.0219602
224. Rooj AK, Mineo M, Godlewski J. MicroRNA and extracellular vesicles in glioblastoma: small but powerful. Brain Tumor Pathology, 2016.
225. Rozowsky J, Kitchen RR, Park JJ, et al. exceRpt: a comprehensive analytic platform for extracellular RNA profiling. Cell systems 2019;8(4):352-57. e3.
226. Rupert DL, Claudio V, Lässer C, et al. Methods for the physical characterization and quantification of extracellular vesicles in biological samples. Biochimica et Biophysica Acta (BBA)-General Subjects 2017;1861(1):3164-79.
227. Rupert DL, Shelke GV, Emilsson G, et al. Dual-wavelength surface plasmon resonance for determining the size and concentration of sub-populations of extracellular vesicles. Analytical chemistry 2016;88(20):9980-88.
228. Russo I, Bubacco L, Greggio E. Exosomes-associated neurodegeneration and progression of Parkinson's disease. Am J Neurodegener Dis 2012;1(3):217-25. [published Online First: 2012/11/18]
229. Saeedi S, Israel S, Nagy C, et al. The emerging role of exosomes in mental disorders. Translational Psychiatry 2019;9(1):122. doi: 10.1038/s41398-019-0459-9

230. Sáenz-Cuesta M, Arbelaiz A, Oregi A, et al. Methods for extracellular vesicles isolation in a hospital setting. Frontiers in Immunology, 2015.
231. Salehi M, Sharifi M. Exosomal miRNAs as novel cancer biomarkers: Challenges and opportunities. Journal of cellular physiology 2018;233(9):6370-80.
232. Saman S, Kim WH, Raya M, et al. Exosome-associated tau is secreted in tauopathy models and is selectively phosphorylated in cerebrospinal fluid in early Alzheimer disease. Journal of Biological Chemistry, 2012.
233. Santucci L, Bruschi M, Del Zotto G, et al. Biological surface properties in extracellular vesicles and their effect on cargo proteins. Scientific Reports 2019;9(1):13048. doi: 10.1038/s41598-019-47598-3
234. Sardar Sinha M, Ansell-Schultz A, Civitelli L, et al. Alzheimer's disease pathology propagation by exosomes containing toxic amyloid-beta oligomers. Acta Neuropathologica 2018;136(1):41-56. doi: 10.1007/s00401-018-1868-1
235. Sarko DK, McKinney CE. Exosomes: origins and therapeutic potential for neurodegenerative disease. Frontiers in neuroscience 2017;11:82.
236. Schageman J, Zeringer E, Li M, et al. The complete exosome workflow solution: from isolation to characterization of RNA cargo. BioMed research international 2013;2013
237. Shakespear N, Ogura M, Yamaki J, et al. Astrocyte-Derived Exosomal microRNA miR-200a-3p Prevents MPP+-Induced Apoptotic Cell Death Through Down-Regulation of MKK4. Neurochemical Research, 2020.
238. Shao H, Im H, Castro CM, et al. New Technologies for Analysis of Extracellular Vesicles. Chem Rev 2018;118(4):1917-50. doi: 10.1021/acs.chemrev.7b00534 [published Online First: 2018/01/31]
239. Sharma P, Mesci P, Carromeu C, et al. Exosomes regulate neurogenesis and circuit assembly. Proc Natl Acad Sci U S A, 2019.
240. Sharples RA, Vella LJ, Nisbet RM, et al. Inhibition of γ-secretase causes increased secretion of amyloid precursor protein C-terminal fragments in association with exosomes. The FASEB Journal, 2008.
241. Shelke GV, Lässer C, Gho YS, et al. Importance of exosome depletion protocols to eliminate functional and RNA-containing extracellular vesicles from fetal bovine serum. Journal of Extracellular Vesicles, 2014.
242. Shelke GV, Lässer C, Gho YS, et al. Importance of exosome depletion protocols to eliminate functional and RNA-containing extracellular vesicles from fetal bovine serum. Journal of extracellular vesicles 2014;3:10.3402/jev.v3.24783. doi: 10.3402/jev.v3.24783
243. Shi M, Liu C, Cook TJ, et al. Plasma exosomal α-synuclein is likely CNS-derived and increased in Parkinson's disease. Acta neuropathologica 2014;128(5):639-50. doi: 10.1007/s00401-014-1314-y [published Online First: 2014/07/06]
244. Simpson RJ, Jensen SS, Lim JWE. Proteomic profiling of exosomes: Current perspectives. Proteomics, 2008.
245. Singh PP, Li L, Schorey JS. Exosomal RNA from Mycobacterium tuberculosis-Infected Cells Is Functional in Recipient Macrophages. Traffic, 2015.
246. Skalnikova HK, Bohuslavova B, Turnovcova K, et al. Isolation and Characterization of Small Extracellular Vesicles from Porcine Blood Plasma, Cerebrospinal Fluid, and Seminal Plasma. Proteomes 2019;7(2):17. doi: 10.3390/proteomes7020017
247. Sódar BW, Kittel Á, Pálóczi K, et al. Low-density lipoprotein mimics blood plasma-derived exosomes and microvesicles during isolation and detection. Scientific reports 2016;6:24316-16. doi: 10.1038/srep24316
248. Soekmadji C, Li B, Huang Y, et al. The future of Extracellular Vesicles as Theranostics – an ISEV meeting report. Journal of

Extracellular Vesicles 2020;9(1):1809766. doi: 10.1080/20013078.2020.1809766
249. Sokolova V, Ludwig AK, Hornung S, et al. Characterisation of exosomes derived from human cells by nanoparticle tracking analysis and scanning electron microscopy. Colloids and Surfaces B: Biointerfaces, 2011.
250. Soria FN, Pampliega O, Bourdenx M, et al. Exosomes, an Unmasked Culprit in Neurodegenerative Diseases. Frontiers in Neuroscience 2017;11 doi: 10.3389/fnins.2017.00026
251. Srinivasan S, Yeri A, Cheah PS, et al. Small RNA Sequencing across Diverse Biofluids Identifies Optimal Methods for exRNA Isolation. Cell 2019;177(2):446-62.e16. doi: 10.1016/j.cell.2019.03.024
252. Stahl Philip D, Raposo G. Exosomes and extracellular vesicles: the path forward. Essays in Biochemistry 2018;62(2):119-24. doi: 10.1042/ebc20170088
253. Stahl PD, Raposo G. Extracellular Vesicles: Exosomes and Microvesicles, Integrators of Homeostasis. Physiology 2019;34(3):169-77. doi: 10.1152/physiol.00045.2018
254. Sterzenbach U, Putz U, Low LH, et al. Engineered Exosomes as Vehicles for Biologically Active Proteins. Molecular Therapy, 2017.
255. Stranska R, Gysbrechts L, Wouters J, et al. Comparison of membrane affinity-based method with size-exclusion chromatography for isolation of exosome-like vesicles from human plasma. Journal of Translational Medicine 2018;16(1) doi: 10.1186/s12967-017-1374-6
256. Stremersch S, Vandenbroucke RE, Van Wonterghem E, et al. Comparing exosome-like vesicles with liposomes for the functional cellular delivery of small RNAs. Journal of Controlled Release, 2016.
257. Suire CN, Eitan E, Shaffer NC, et al. Walking speed decline in older adults is associated with elevated pro-BDNF in plasma extracellular vesicles. Experimental Gerontology, 2017.
258. Sun L, Meckes D. Methodological Approaches to Study Extracellular Vesicle miRNAs in Epstein–Barr Virus-Associated Cancers. International Journal of Molecular Sciences 2018;19(9):2810. doi: 10.3390/ijms19092810
259. Szatanek R, Baj-Krzyworzeka M, Zimoch J, et al. The Methods of Choice for Extracellular Vesicles (EVs) Characterization. International Journal of Molecular Sciences 2017;18(6):1153. doi: 10.3390/ijms18061153
260. Tai Y-L, Chen K-C, Hsieh J-T, et al. Exosomes in cancer development and clinical applications. Cancer Science 2018;109(8):2364-74. doi: 10.1111/cas.13697
261. Tamkovich SN, Tutanov OS, Laktionov PP. Exosomes: Generation, structure, transport, biological activity, and diagnostic application. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology 2016;10(3):163-73. doi: 10.1134/s1990747816020112
262. Tang Y-T, Huang Y-Y, Zheng L, et al. Comparison of isolation methods of exosomes and exosomal RNA from cell culture medium and serum. International Journal of Molecular Medicine 2017;40(3):834-44. doi: 10.3892/ijmm.2017.3080
263. Tauro BJ, Greening DW, Mathias RA, et al. Comparison of ultracentrifugation, density gradient separation, and immunoaffinity capture methods for isolating human colon cancer cell line LIM1863-derived exosomes. Methods, 2012.
264. Théry C, Amigorena S, Raposo G, et al. Isolation and Characterization of Exosomes from Cell Culture Supernatants and Biological Fluids. Current Protocols in Cell Biology 2006;30(1):3.22.1-3.22.29. doi: 10.1002/0471143030.cb0322s30
265. Théry C, Witwer KW, Aikawa E, et al. Minimal information for studies of extracellular vesicles 2018 (MISEV2018): a position statement of the International Society for Extracellular Vesicles and update of the

MISEV2014 guidelines. Journal of Extracellular Vesicles 2018;7(1):1535750. doi: 10.1080/20013078.2018.1535750
266. Théry C, Zitvogel L, Amigorena S. Exosomes: Composition, biogenesis and function. Nature Reviews Immunology, 2002.
267. Tkach M, Théry C. Communication by Extracellular Vesicles: Where We Are and Where We Need to Go. Cell, 2016.
268. Tofaris GK. A Critical Assessment of Exosomes in the Pathogenesis and Stratification of Parkinson’s Disease. Journal of Parkinson's Disease 2017;7(4):569-76. doi: 10.3233/jpd-171176
269. Torralba D, Baixauli F, Villarroya-Beltri C, et al. Priming of dendritic cells by DNA-containing extracellular vesicles from activated T cells through antigen-driven contacts. Nature Communications 2018;9(1) doi: 10.1038/s41467-018-05077-9
270. Vagner T, Chin A, Mariscal J, et al. Protein Composition Reflects Extracellular Vesicle Heterogeneity. PROTEOMICS 2019;19(8):1800167. doi: 10.1002/pmic.201800167
271. Valadi H, Ekström K, Bossios A, et al. Exosome-mediated transfer of mRNAs and microRNAs is a novel mechanism of genetic exchange between cells. Nature Cell Biology, 2007.
272. Van Deun J, Mestdagh P, Agostinis P, et al. EV-TRACK: Transparent reporting and centralizing knowledge in extracellular vesicle research. Nature Methods, 2017.
273. Van Deun J, Mestdagh P, Sormunen R, et al. The impact of disparate isolation methods for extracellular vesicles on downstream RNA profiling. Journal of Extracellular Vesicles, 2014.
274. Van Deun J, Mestdagh P, Sormunen R, et al. The impact of disparate isolation methods for extracellular vesicles on downstream RNA profiling. Journal of Extracellular Vesicles 2014;3(1):24858. doi: 10.3402/jev.v3.24858
275. Van Giau V, An SSA. Emergence of exosomal miRNAs as a diagnostic biomarker for Alzheimer's disease. Journal of the Neurological Sciences, 2016.
276. Van Giau V, An SSA. Emergence of exosomal miRNAs as a diagnostic biomarker for Alzheimer's disease. Journal of the Neurological Sciences 2016;360:141-52. doi: 10.1016/j.jns.2015.12.005
277. Van Niel G, D'Angelo G, Raposo G. Shedding light on the cell biology of extracellular vesicles. Nature Reviews Molecular Cell Biology 2018;19(4):213-28. doi: 10.1038/nrm.2017.125
278. Varcianna A, Myszczynska MA, Castelli LM, et al. Micro-RNAs secreted through astrocyte-derived extracellular vesicles cause neuronal network degeneration in C9orf72 ALS. EBioMedicine, 2019.
279. Varga Z, Yuana Y, Grootemaat AE, et al. Towards traceable size determination of extracellular vesicles. 2014;3(0) doi: 10.3402/jev.v3.23298
280. Vella LJ, Hill AF, Cheng L. Focus on Extracellular Vesicles: Exosomes and Their Role in Protein Trafficking and Biomarker Potential in Alzheimer's and Parkinson's Disease. International journal of molecular sciences 2016;17(2):173-73. doi: 10.3390/ijms17020173
281. Vella LJ, Sharples RA, Lawson VA, et al. Packaging of prions into exosomes is associated with a novel pathway of PrP processing. Journal of Pathology, 2007.
282. Verweij FJ, Hyenne V, Van Niel G, et al. Extracellular Vesicles: Catching the Light in Zebrafish. Trends in Cell Biology 2019;29(10):770-76. doi: 10.1016/j.tcb.2019.07.007
283. Wahlgren J, Karlson TDL, Brisslert M, et al. Plasma exosomes can deliver exogenous short interfering RNA to monocytes and lymphocytes. Nucleic Acids Research 2012;40(17):e130-e30. doi: 10.1093/nar/gks463

284. Wang G, Dinkins M, He Q, et al. Astrocytes secrete exosomes enriched with proapoptotic ceramide and Prostate Apoptosis Response 4 (PAR-4): Potential mechanism of apoptosis induction in Alzheimer Disease (AD). Journal of Biological Chemistry, 2012.
285. Wang L, Zhang L. Circulating Exosomal miRNA as Diagnostic Biomarkers of Neurodegenerative Diseases. Frontiers in molecular neuroscience 2020;13:53-53. doi: 10.3389/fnmol.2020.00053
286. Wang Y, Balaji V, Kaniyappan S, et al. The release and trans-synaptic transmission of Tau via exosomes. Molecular Neurodegeneration 2017;12(1) doi: 10.1186/s13024-016-0143-y
287. Watson LS, Hamlett ED, Stone TD, et al. Neuronally derived extracellular vesicles: an emerging tool for understanding Alzheimer’s disease. Molecular neurodegeneration 2019;14(1):1-9.
288. Welton JL, Webber JP, Botos L-A, et al. Ready-made chromatography columns for extracellular vesicle isolation from plasma. Journal of Extracellular Vesicles 2015;4(1):27269. doi: 10.3402/jev.v4.27269
289. Willms E, Johansson HJ, Mäger I, et al. Cells release subpopulations of exosomes with distinct molecular and biological properties. Scientific Reports, 2016.
290. Willms E, Johansson HJ, Mäger I, et al. Cells release subpopulations of exosomes with distinct molecular and biological properties. Scientific Reports 2016;6(1):22519. doi: 10.1038/srep22519
291. Winston CN, Goetzl EJ, Akers JC, et al. Prediction of conversion from mild cognitive impairment to dementia with neuronally derived blood exosome protein profile. Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring 2016;3(1):63-72. doi: 10.1016/j.dadm.2016.04.001
292. Winston CN, Goetzl EJ, Baker LD, et al. Growth Hormone-Releasing Hormone Modulation of Neuronal Exosome Biomarkers in Mild Cognitive Impairment. Journal of Alzheimer's Disease 2018;66(3):971-81. doi: 10.3233/jad-180302
293. Winston CN, Romero HK, Ellisman M, et al. Assessing Neuronal and Astrocyte Derived Exosomes From Individuals With Mild Traumatic Brain Injury for Markers of Neurodegeneration and Cytotoxic Activity. Frontiers in Neuroscience 2019;13 doi: 10.3389/fnins.2019.01005
294. Witwer KW, Buzás EI, Bemis LT, et al. Standardization of sample collection, isolation and analysis methods in extracellular vesicle research. Journal of Extracellular Vesicles 2013;2(1):20360. doi: 10.3402/jev.v2i0.20360
295. Witwer KW, Soekmadji C, Hill AF, et al. Updating the MISEV minimal requirements for extracellular vesicle studies: building bridges to reproducibility. Journal of Extracellular Vesicles 2017;6(1):1396823. doi: 10.1080/20013078.2017.1396823
296. Witwer KW, Théry C. Extracellular vesicles or exosomes? On primacy, precision, and popularity influencing a choice of nomenclature. Journal of extracellular vesicles 2019;8(1):1648167-67. doi: 10.1080/20013078.2019.1648167
297. Wortzel I, Dror S, Kenific CM, et al. Exosome-Mediated Metastasis: Communication from a Distance. Developmental Cell 2019;49(3):347-60. doi: 10.1016/j.devcel.2019.04.011
298. Wu Y, Deng W, Klinke Ii DJ. Exosomes: improved methods to characterize their morphology, RNA content, and surface protein biomarkers. The Analyst 2015;140(19):6631-42. doi: 10.1039/c5an00688k
299. Xiao T, Zhang W, Jiao B, et al. The role of exosomes in the pathogenesis of Alzheimer' disease. Translational Neurodegeneration, 2017.
300. Xin H, Katakowski M, Wang F, et al. MicroRNA cluster miR-17-92 Cluster in Exosomes Enhance Neuroplasticity and Functional Recovery after Stroke in Rats, 2017.

301. Xing F, Liu Y, Wu S-Y, et al. Loss of XIST in Breast Cancer Activates MSN-c-Met and Reprograms Microglia via Exosomal miRNA to Promote Brain Metastasis. Cancer Research 2018;78(15):4316-30. doi: 10.1158/0008-5472.can-18-1102
302. Xu L, Cao H, Xie Y, et al. Exosome-shuttled miR-92b-3p from ischemic preconditioned astrocytes protects neurons against oxygen and glucose deprivation. Brain Research, 2019.
303. Xu R, Greening DW, Zhu HJ, et al. Extracellular vesicle isolation and characterization: Toward clinical application. Journal of Clinical Investigation, 2016.
304. Yáñez-Mó M, Siljander PRM, Andreu Z, et al. Biological properties of extracellular vesicles and their physiological functions. Journal of extracellular vesicles 2015;4:27066-66. doi: 10.3402/jev.v4.27066
305. Yang L, Niu F, Yao H, et al. Exosomal miR-9 Released from HIV Tat Stimulated Astrocytes Mediates Microglial Migration. Journal of Neuroimmune Pharmacology, 2018.
306. Ying LW, Bai DW, Ao Z, et al. Role of exosomes in central nervous system diseases. Frontiers in molecular neuroscience 2019;12:240.
307. You Y, Borgmann K, Edara VV, et al. Activated human astrocyte-derived extracellular vesicles modulate neuronal uptake, differentiation and firing. Journal of extracellular vesicles 2019;9(1):1706801-01. doi: 10.1080/20013078.2019.1706801
308. Yu L-L, Zhu J, Liu J-X, et al. A Comparison of Traditional and Novel Methods for the Separation of Exosomes from Human Samples. BioMed Research International 2018;2018:1-9. doi: 10.1155/2018/3634563
309. Yuan D, Zhao Y, Banks WA, et al. Macrophage exosomes as natural nanocarriers for protein delivery to inflamed brain. Biomaterials, 2017.
310. Yuana Y, Koning RI, Kuil ME, et al. Cryo-electron microscopy of extracellular vesicles in fresh plasma. 2013;2(0) doi: 10.3402/jev.v2i0.21494
311. Yuana Y, Levels J, Grootemaat A, et al. Co-isolation of extracellular vesicles and high-density lipoproteins using density gradient ultracentrifugation. Journal of Extracellular Vesicles 2014;3(1):23262. doi: 10.3402/jev.v3.23262
312. Yuyama K, Igarashi Y. Physiological and pathological roles of exosomes in the nervous system. Biomolecular Concepts 2016;7(1):53-68. doi: 10.1515/bmc-2015-0033
313. Yuyama K, Igarashi Y. Exosomes as carriers of Alzheimer's amyloid-ß. Frontiers in Neuroscience, 2017.
314. Yuyama K, Igarashi Y. Exosomes as carriers of Alzheimer's amyloid-ß. Frontiers in neuroscience 2017;11:229.
315. Yuyama K, Sun H, Mitsutake S, et al. Sphingolipid-modulated exosome secretion promotes clearance of amyloid-β by microglia. Journal of Biological Chemistry, 2012.
316. Yuyama K, Sun H, Sakai S, et al. Decreased amyloid-β pathologies by intracerebral loading of glycosphingolipid-enriched exosomes in Alzheimer model mice. Journal of Biological Chemistry, 2014.
317. Zabeo D, Cvjetkovic A, Lässer C, et al. Exosomes purified from a single cell type have diverse morphology. Journal of Extracellular Vesicles 2017;6(1):1329476. doi: 10.1080/20013078.2017.1329476
318. Zeringer E. Methods for the extraction and RNA profiling of exosomes. World Journal of Methodology, 2013.
319. Zetterberg H, Burnham SC. Blood-based molecular biomarkers for Alzheimer’s disease. Molecular Brain 2019;12(1) doi: 10.1186/s13041-019-0448-1
320. Zhang G, Yang P. A novel cell-cell communication mechanism in the nervous system: exosomes. Journal of neuroscience research 2018;96(1):45-52.

321. Zhang H, Freitas D, Kim HS, et al. Identification of distinct nanoparticles and subsets of extracellular vesicles by asymmetric flow field-flow fractionation. Nature Cell Biology 2018;20(3):332-43. doi: 10.1038/s41556-018-0040-4
322. Zhang J, Li S, Li L, et al. Exosome and Exosomal MicroRNA: Trafficking, Sorting, and Function. Genomics, Proteomics & Bioinformatics 2015;13(1):17-24. doi: 10.1016/j.gpb.2015.02.001
323. Zhang L, Wang H. Long Non-coding RNA in CNS Injuries: A New Target for Therapeutic Intervention. Molecular Therapy - Nucleic Acids 2019;17:754-66. doi: 10.1016/j.omtn.2019.07.013
324. Zhang L, Zhang S, Yao J, et al. Microenvironment-induced PTEN loss by exosomal microRNA primes brain metastasis outgrowth. Nature, 2015.
325. Zhang Q, Higginbotham JN, Jeppesen DK, et al. Transfer of Functional Cargo in Exomeres. Cell Reports 2019;27(3):940-54.e6. doi: 10.1016/j.celrep.2019.01.009
326. Zhang S, Eitan E, Wu TY, et al. Intercellular transfer of pathogenic α-synuclein by extracellular vesicles is induced by the lipid peroxidation product 4-hydroxynonenal. Neurobiology of Aging, 2018.
327. Zhang Y, Chopp M, Meng Y, et al. Effect of exosomes derived from multipluripotent mesenchymal stromal cells on functional recovery and neurovascular plasticity in rats after traumatic brain injury. Journal of Neurosurgery, 2015.
328. Zhang Y, Kim MS, Jia B, et al. Hypothalamic stem cells control ageing speed partly through exosomal miRNAs. Nature, 2017.
329. Zheng T, Pu J, Chen Y, et al. Plasma exosomes spread and cluster around β-amyloid plaques in an animal model of Alzheimer's disease. Frontiers in aging neuroscience 2017;9:12.
330. Zhou H, Yuen PST, Pisitkun T, et al. Collection, storage, preservation, and normalization of human urinary exosomes for biomarker discovery. Kidney International, 2006.
331. Zhu L, Qu XH, Sun YL, et al. Novel method for extracting exosomes of hepatocellular carcinoma cells. World Journal of Gastroenterology, 2014.