Jean-Sebastien Silvestre

List of Publications by Citations

122 papers	8,897 citations	53 h-index	93 g-index
141 ext. papers	9,884 ext. citations	10 avg, IF	5.54 L-index

#	Paper	IF	Citations
122	Plasticity of human adipose lineage cells toward endothelial cells: physiological and therapeutic perspectives. *Circulation*, **2004**, 109, 656-63	16.7	1144
121	Myocardial production of aldosterone and corticosterone in the rat. Physiological regulation. *Journal of Biological Chemistry*, **1998**, 273, 4883-91	5.4	340
120	Activation of cardiac aldosterone production in rat myocardial infarction: effect of angiotensin II receptor blockade and role in cardiac fibrosis. *Circulation*, **1999**, 99, 2694-701	16.7	326
119	B lymphocytes trigger monocyte mobilization and impair heart function after acute myocardial infarction. *Nature Medicine*, **2013**, 19, 1273-80	50.5	313
118	Lactadherin promotes VEGF-dependent neovascularization. *Nature Medicine*, **2005**, 11, 499-506	50.5	248
117	Angiotensin AT1 receptor subtype as a cardiac target of aldosterone: role in aldosterone-salt-induced fibrosis. *Hypertension*, **1999**, 33, 981-6	8.5	208
116	Phase I trial: the use of autologous cultured adipose-derived stroma/stem cells to treat patients with non-revascularizable critical limb ischemia. *Cytotherapy*, **2014**, 16, 245-57	4.8	205
115	Angiotensin II angiogenic effect in vivo involves vascular endothelial growth factor- and inflammation-related pathways. *Laboratory Investigation*, **2002**, 82, 747-56	5.9	194
114	Postischemic revascularization: from cellular and molecular mechanisms to clinical applications. *Physiological Reviews*, **2013**, 93, 1743-802	47.9	173
113	Antiangiogenic effect of interleukin-10 in ischemia-induced angiogenesis in mice hindlimb. *Circulation Research*, **2000**, 87, 448-52	15.7	173
112	Angiogenesis in the infarcted myocardium. *Antioxidants and Redox Signaling*, **2013**, 18, 1100-13	8.4	164
111	Ex vivo priming of endothelial progenitor cells with SDF-1 before transplantation could increase their proangiogenic potential. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2008**, 28, 644-50	9.4	163
110	Impairment in ischemia-induced neovascularization in diabetes: bone marrow mononuclear cell dysfunction and therapeutic potential of placenta growth factor treatment. *American Journal of Pathology*, **2004**, 164, 457-66	5.8	158
109	Vascular endothelial growth factor-B promotes in vivo angiogenesis. *Circulation Research*, **2003**, 93, 114-23	15.7	155
108	Proangiogenic effect of angiotensin-converting enzyme inhibition is mediated by the bradykinin B(2) receptor pathway. *Circulation Research*, **2001**, 89, 678-83	15.7	150
107	CD40 ligand+ microparticles from human atherosclerotic plaques stimulate endothelial proliferation and angiogenesis a potential mechanism for intraplaque neovascularization. *Journal of the American College of Cardiology*, **2008**, 52, 1302-11	15.1	145
106	NADPH oxidase-derived overproduction of reactive oxygen species impairs postischemic neovascularization in mice with type 1 diabetes. *American Journal of Pathology*, **2006**, 169, 719-28	5.8	141

105	Rho-associated protein kinase contributes to early atherosclerotic lesion formation in mice. *Circulation Research*, **2003**, 93, 884-8	15.7	139
104	Blockade of advanced glycation end-product formation restores ischemia-induced angiogenesis in diabetic mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 8555-60	11.5	123
103	Biological determinants of aldosterone-induced cardiac fibrosis in rats. *Hypertension*, **1995**, 26, 971-8	8.5	122
102	Cardiovascular progenitor-derived extracellular vesicles recapitulate the beneficial effects of their parent cells in the treatment of chronic heart failure. *Journal of Heart and Lung Transplantation*, **2016**, 35, 795-807	5.8	121
101	Transplantation of bone marrow-derived mononuclear cells in ischemic apolipoprotein E-knockout mice accelerates atherosclerosis without altering plaque composition. *Circulation*, **2003**, 108, 2839-42	16.7	121
100	Intra-Cardiac Release of Extracellular Vesicles Shapes Inflammation Following Myocardial Infarction. *Circulation Research*, **2018**, 123, 100-106	15.7	113
99	Microparticles from ischemic muscle promotes postnatal vasculogenesis. *Circulation*, **2009**, 119, 2808-17	16.7	105
98	Post-ischaemic neovascularization and inflammation. *Cardiovascular Research*, **2008**, 78, 242-9	9.9	103
97	Diabetes mellitus and ischemic diseases: molecular mechanisms of vascular repair dysfunction. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2014**, 34, 1126-35	9.4	102
96	Dual effect of angiotensin-converting enzyme inhibition on angiogenesis in type 1 diabetic mice. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2005**, 25, 65-70	9.4	95
95	Antiangiogenic effect of angiotensin II type 2 receptor in ischemia-induced angiogenesis in mice hindlimb. *Circulation Research*, **2002**, 90, 1072-9	15.7	93
94	PSGL-1-mediated activation of EphB4 increases the proangiogenic potential of endothelial progenitor cells. *Journal of Clinical Investigation*, **2007**, 117, 1527-37	15.9	92
93	Regulation of matrix metalloproteinase activity in ischemic tissue by interleukin-10: role in ischemia-induced angiogenesis. *Circulation Research*, **2001**, 89, 259-64	15.7	91
92	Bone morphogenetic proteins 2 and 4 are selectively expressed by late outgrowth endothelial progenitor cells and promote neoangiogenesis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2008**, 28, 2137-43	9.4	90
91	Acellular therapeutic approach for heart failure: in vitro production of extracellular vesicles from human cardiovascular progenitors. *European Heart Journal*, **2018**, 39, 1835-1847	9.5	84
90	On-site education of VEGF-recruited monocytes improves their performance as angiogenic and arteriogenic accessory cells. *Journal of Experimental Medicine*, **2013**, 210, 2611-25	16.6	80
89	Endothelial nitric oxide synthase lies downstream from angiotensin II-induced angiogenesis in ischemic hindlimb. *Hypertension*, **2002**, 39, 830-5	8.5	80
88	Cardiac aldosterone production and ventricular remodeling. *Kidney International*, **2000**, 57, 1346-51	9.9	80

87	TREM-1 Mediates Inflammatory Injury and Cardiac Remodeling Following Myocardial Infarction. *Circulation Research*, **2015**, 116, 1772-82	15.7	77
86	Coadministration of endothelial and smooth muscle progenitor cells enhances the efficiency of proangiogenic cell-based therapy. *Circulation Research*, **2008**, 103, 751-60	15.7	77
85	Cardiac senescence is associated with enhanced expression of angiotensin II receptor subtypes. *Endocrinology*, **1998**, 139, 2579-87	4.8	77
84	Increase in vascular permeability and vasodilation are critical for proangiogenic effects of stem cell therapy. *Circulation*, **2006**, 114, 328-38	16.7	74
83	Evidence of a role for lactadherin in Alzheimer's disease. *American Journal of Pathology*, **2007**, 170, 921-9	5.8	74
82	Myeloid-Epithelial-Reproductive Receptor Tyrosine Kinase and Milk Fat Globule Epidermal Growth Factor 8 Coordinately Improve Remodeling After Myocardial Infarction via Local Delivery of Vascular Endothelial Growth Factor. *Circulation*, **2016**, 133, 826-39	16.7	73
81	Aldosterone enhances ischemia-induced neovascularization through angiotensin II-dependent pathway. *Circulation*, **2004**, 109, 1933-7	16.7	72
80	Mast cells regulate myofilament calcium sensitization and heart function after myocardial infarction. *Journal of Experimental Medicine*, **2016**, 213, 1353-74	16.6	70
79	Inhibition of prolyl hydroxylase domain proteins promotes therapeutic revascularization. *Circulation*, **2009**, 120, 50-9	16.7	68
78	Bone-marrow-derived very small embryonic-like stem cells in patients with critical leg ischaemia: evidence of vasculogenic potential. *Thrombosis and Haemostasis*, **2015**, 113, 1084-94	7	67
77	The chemokine decoy receptor D6 prevents excessive inflammation and adverse ventricular remodeling after myocardial infarction. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2012**, 32, 2206-13	9.4	64
76	Regulatory T cells modulate postischemic neovascularization. *Circulation*, **2009**, 120, 1415-25	16.7	62
75	Increased vitreous shedding of microparticles in proliferative diabetic retinopathy stimulates endothelial proliferation. *Diabetes*, **2010**, 59, 694-701	0.9	58
74	Modulation of macrophage activation state protects tissue from necrosis during critical limb ischemia in thrombospondin-1-deficient mice. *PLoS ONE*, **2008**, 3, e3950	3.7	57
73	Interleukin-18/interleukin-18 binding protein signaling modulates ischemia-induced neovascularization in mice hindlimb. *Circulation Research*, **2002**, 91, 441-8	15.7	56
72	Preconditioning by mitochondrial reactive oxygen species improves the proangiogenic potential of adipose-derived cells-based therapy. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2009**, 29, 1093-9	9.4	55
71	Distinct patterns of circulating endothelial cells in pulmonary hypertension. *European Respiratory Journal*, **2010**, 36, 1284-93	13.6	54
70	Regulation of monocyte subset systemic levels by distinct chemokine receptors controls post-ischaemic neovascularization. *Cardiovascular Research*, **2010**, 88, 186-95	9.9	54

69	Hypertension impairs postnatal vasculogenesis: role of antihypertensive agents. *Hypertension*, **2008**, 51, 1537-44	8.5	51
68	Small interfering RNAs induce target-independent inhibition of tumor growth and vasculature remodeling in a mouse model of hepatocellular carcinoma. *American Journal of Pathology*, **2010**, 177, 3192-201	5.8	49
67	Neuroblast survival depends on mature vascular network formation after mouse stroke: role of endothelial and smooth muscle progenitor cell co-administration. *European Journal of Neuroscience*, **2012**, 35, 1208-17	3.5	47
66	Akt/protein kinase B and endothelial nitric oxide synthase mediate muscular neovascularization induced by tissue kallikrein gene transfer. *Circulation*, **2004**, 110, 1638-44	16.7	46
65	Aldosterone and the heart: towards a physiological function?. *Cardiovascular Research*, **1999**, 43, 7-12	9.9	46
64	Homeostatic and tissue reparation defaults in mice carrying selective genetic invalidation of CXCL12/proteoglycan interactions. *Circulation*, **2012**, 126, 1882-95	16.7	45
63	Dynamics of Cardiac Neutrophil Diversity in Murine Myocardial Infarction. *Circulation Research*, **2020**, 127, e232-e249	15.7	43
62	Chronic blockade of endothelin receptors improves ischemia-induced angiogenesis in rat hindlimbs through activation of vascular endothelial growth factor-no pathway. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2001**, 21, 1598-603	9.4	41
61	Impairment in postischemic neovascularization in mice lacking the CXC chemokine receptor 3. *Circulation Research*, **2005**, 96, 576-82	15.7	38
60	Increased ischemia-induced angiogenesis in the staggerer mouse, a mutant of the nuclear receptor Roralpha. *Circulation Research*, **2001**, 89, 1209-15	15.7	37
59	HIF-prolyl hydroxylase 2 inhibition enhances the efficiency of mesenchymal stem cell-based therapies for the treatment of critical limb ischemia. *Stem Cells*, **2014**, 32, 231-43	5.8	36
58	Angiogenic potential of BM MSCs derived from patients with critical leg ischemia. *Bone Marrow Transplantation*, **2012**, 47, 997-1000	4.4	35
57	Vascular fate of adipose tissue-derived adult stromal cells in the ischemic murine brain: A combined imaging-histological study. *NeuroImage*, **2007**, 34, 1-11	7.9	35
56	Decreased arteriolar density in endothelial nitric oxide synthase knockout mice is due to hypertension, not to the constitutive defect in endothelial nitric oxide synthase enzyme. *Journal of Hypertension*, **2002**, 20, 273-80	1.9	35
55	Immune Modulation of Cardiac Repair and Regeneration: The Art of Mending Broken Hearts. *Frontiers in Cardiovascular Medicine*, **2016**, 3, 40	5.4	35
54	C/EBP homologous protein-10 (CHOP-10) limits postnatal neovascularization through control of endothelial nitric oxide synthase gene expression. *Circulation*, **2012**, 125, 1014-26	16.7	33
53	Very-low-dose combination of the angiotensin-converting enzyme inhibitor perindopril and the diuretic indapamide induces an early and sustained increase in neovascularization in rat ischemic legs. *Journal of Pharmacology and Experimental Therapeutics*, **2002**, 303, 1038-43	4.7	33
52	Combination of the angiotensin-converting enzyme inhibitor perindopril and the diuretic indapamide activate postnatal vasculogenesis in spontaneously hypertensive rats. *Journal of Pharmacology and Experimental Therapeutics*, **2008**, 325, 766-73	4.7	31

51	Chronic hypoxia-induced angiogenesis normalizes blood pressure in spontaneously hypertensive rats. *Circulation Research*, **2008**, 103, 761-9	15.7	30
50	Sympathetic nervous system regulates bone marrow-derived cell egress through endothelial nitric oxide synthase activation: role in postischemic tissue remodeling. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2012**, 32, 643-53	9.4	29
49	MicroRNA-21 coordinates human multipotent cardiovascular progenitors therapeutic potential. *Stem Cells*, **2014**, 32, 2908-22	5.8	28
48	Towards the therapeutic use of vascular smooth muscle progenitor cells. *Cardiovascular Research*, **2012**, 95, 205-14	9.9	28
47	Vascular progenitor cells and diabetes: role in postischemic neovascularisation. *Diabetes and Metabolism*, **2008**, 34 Suppl 1, S33-6	5.4	28
46	Expression and modulation of steroidogenic acute regulatory protein messenger ribonucleic acid in rat cardiocytes and after myocardial infarction. *Endocrinology*, **2003**, 144, 1861-8	4.8	27
45	Extracellular vesicles from human cardiovascular progenitors trigger a reparative immune response in infarcted hearts. *Cardiovascular Research*, **2021**, 117, 292-307	9.9	27
44	Human very Small Embryonic-like Cells Support Vascular Maturation and Therapeutic Revascularization Induced by Endothelial Progenitor Cells. *Stem Cell Reviews and Reports*, **2017**, 13, 552-560	6.4	25
43	alpha2beta1 integrin controls association of Rac with the membrane and triggers quiescence of endothelial cells. *Journal of Cell Science*, **2010**, 123, 2491-501	5.3	25
42	Tetrapeptide AcSDKP induces postischemic neovascularization through monocyte chemoattractant protein-1 signaling. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2006**, 26, 773-9	9.4	25
41	Ultrasonic assessment of hepatic blood flow as a marker of mouse hepatocarcinoma. *Ultrasound in Medicine and Biology*, **2007**, 33, 561-70	3.5	24
40	Endothelial nitric oxide synthase overexpression restores the efficiency of bone marrow mononuclear cell-based therapy. *American Journal of Pathology*, **2011**, 178, 55-60	5.8	23
39	Iron Regulator Hepcidin Impairs Macrophage-Dependent Cardiac Repair After Injury. *Circulation*, **2019**, 139, 1530-1547	16.7	23
38	Bone marrow-derived mesenchymal stem cell-loaded fibrin patches act as a reservoir of paracrine factors in chronic myocardial infarction. *Journal of Tissue Engineering and Regenerative Medicine*, **2017**, 11, 3417-3427	4.4	22
37	Altered TP receptor function in isolated, perfused kidneys of nondiabetic and diabetic ApoE-deficient mice. *American Journal of Physiology - Renal Physiology*, **2008**, 294, F120-9	4.3	22
36	Ephrin-B2-activated peripheral blood mononuclear cells from diabetic patients restore diabetes-induced impairment of postischemic neovascularization. *Diabetes*, **2012**, 61, 2621-32	0.9	21
35	Cardiomyocytes and Macrophages Discourse on the Method to Govern Cardiac Repair. *Frontiers in Cardiovascular Medicine*, **2018**, 5, 134	5.4	21
34	Adiponectinemia controls pro-angiogenic cell therapy. *Stem Cells*, **2009**, 27, 2712-21	5.8	20

33	Different regulation of cardiac and renal corticosteroid receptors in aldosterone-salt treated rats: effect of hypertension and glucocorticoids. *Journal of Molecular and Cellular Cardiology*, **2000**, 32, 1249-63	5.8	20
32	Thrombin receptor PAR-1 activation on endothelial progenitor cells enhances chemotaxis-associated genes expression and leukocyte recruitment by a COX-2-dependent mechanism. *Angiogenesis*, **2015**, 18, 347-59	10.6	19
31	Thromboxane A2/prostaglandin H2 receptor activation mediates angiotensin II-induced postischemic neovascularization. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2006**, 26, 488-93	9.4	19
30	Cytotoxic CD8 T cells promote granzyme B-dependent adverse post-ischemic cardiac remodeling. *Nature Communications*, **2021**, 12, 1483	17.4	19
29	The Evolution of the Stem Cell Theory for Heart Failure. *EBioMedicine*, **2015**, 2, 1871-9	8.8	18
28	Pro-angiogenic cell-based therapy for the treatment of ischemic cardiovascular diseases. *Thrombosis Research*, **2012**, 130 Suppl 1, S90-4	8.2	18
27	Very Small Embryonic-like Stem Cells Are Mobilized in Human Peripheral Blood during Hypoxemic COPD Exacerbations and Pulmonary Hypertension. *Stem Cell Reviews and Reports*, **2017**, 13, 561-566	6.4	15
26	Lung-derived HMGB1 is detrimental for vascular remodeling of metabolically imbalanced arterial macrophages. *Nature Communications*, **2020**, 11, 4311	17.4	12
25	Strategies to Enhance the Efficiency of Endothelial Progenitor Cell Therapy by Ephrin B2 Pretreatment and Coadministration with Smooth Muscle Progenitor Cells on Vascular Function During the Wound-Healing Process in Irradiated or Nonirradiated Condition. *Cell Transplantation*, **2015**, 24, 1343-61	4	11
24	Endothelial Cell Indoleamine 2, 3-Dioxygenase 1 Alters Cardiac Function After Myocardial Infarction Through Kynurenine. *Circulation*, **2021**, 143, 566-580	16.7	10
23	TREM-1 orchestrates angiotensin II-induced monocyte trafficking and promotes experimental abdominal aortic aneurysm. *Journal of Clinical Investigation*, **2021**, 131,	15.9	10
22	Anti-integrin therapy improves cardiac fibrosis after myocardial infarction by blunting cardiac PW1 stromal cells. *Scientific Reports*, **2020**, 10, 11404	4.9	9
21	Innate Lymphoid Cells Promote Recovery of Ventricular Function After Myocardial Infarction. *Journal of the American College of Cardiology*, **2021**, 78, 1127-1142	15.1	9
20	Is aberrant CD8+ T cell activation by hypertension associated with cardiac injury in severe cases of COVID-19?. *Cellular and Molecular Immunology*, **2020**, 17, 675-676	15.4	8
19	Biomarkers of vascular dysfunction and cognitive decline in patients with Alzheimer's disease: no evidence for association in elderly subjects. *Aging Clinical and Experimental Research*, **2016**, 28, 1133-1141	4.8	6
18	Peripheral post-ischemic vascular repair is impaired in a murine model of Alzheimer's disease. *Angiogenesis*, **2018**, 21, 557-569	10.6	5
17	Obesity in Midlife Hampers Resting and Sensory-Evoked Cerebral Blood Flow in Mice. *Obesity*, **2021**, 29, 150-158	8	5
16	Evaluation of cardiac dysfunction in adult zebrafish using high frequency echocardiography. *Life Sciences*, **2020**, 253, 117732	6.8	4

15	Characterization of nerve and microvessel damage and recovery in type 1 diabetic mice after permanent femoral artery ligation. *Journal of Neuroscience Research*, **2015**, 93, 1451-61	4.4	4
14	Circulating progenitor cells and cardiovascular outcomes: latest evidence on angiotensin-converting enzyme inhibitors. *European Heart Journal Supplements*, **2009**, 11, E17-E21	1.5	4
13	The cardiac endocrine aldosterone system. *Current Opinion in Endocrinology, Diabetes and Obesity*, **1999**, 6, 204		4
12	Time-resolved single-cell transcriptomics uncovers dynamics of cardiac neutrophil diversity in murine myocardial infarction		4
11	Evaluation of rat heart microvasculature with high-spatial-resolution susceptibility-weighted MR imaging. *Radiology*, **2013**, 269, 277-82	20.5	3
10	Splenic Marginal Zone B Lymphocytes Regulate Cardiac Remodeling After Acute Myocardial Infarction in Mice.. *Journal of the American College of Cardiology*, **2022**, 79, 632-647	15.1	2
9	Multiparametric optical and MR imaging demonstrate inhibition of tumor angiogenesis natural history by mural cell therapy. *Magnetic Resonance in Medicine*, **2014**, 72, 841-9	4.4	1
8	Arteries or veins?: VEGF helps EPCs choose their cAMP. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2006**, 26, 1934-5	9.4	1
7	Hormones and the neovascularization process: role of angiotensin II. *Exs*, **2005**, 77-93		1
6	Extracellular vesicles fail to trigger the generation of new cardiomyocytes in chronically infarcted hearts. *Theranostics*, **2021**, 11, 10114-10124	12.1	1
5	Stem-Cell-Based Therapies for Vascular Regeneration in Peripheral Artery Diseases **2016**, 324-346		
4	Interaction between the microcirculatory network and the systemic arterial pressure. *Artery Research*, **2010**, 4, 108	2.2	
3	Evidence for Vasculogenic Potential and Endothelial Differentiation of Bone-Marrow-Derived Very Small Embryonic-like Stem Cells. *Blood*, **2014**, 124, 5120-5120	2.2	
2	Hypoxia, Arterial Blood Pressure, and Microcirculation **2014**, 123-136		
1	Endothelial Progenitor Cells and Cardiovascular Ischemic Diseases: Characterization, Functions, and Potential Clinical Applications **2014**, 235-264		