



**Recent References (2022-Present) on the Administration of Angiotensin II
Using ALZET® Osmotic Pumps**

Q11033: T. Zhang, *et al.* The protective effects of a novel AT(2) receptor agonist, beta-Pro(7)Ang III in ischemia-reperfusion kidney injury. *Biomedicine & Pharmacotherapy* 2023;161(114556)

Agents: Angiotensin II, B-pro7 **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 2001; **Duration:** 7 days;

ALZET Comments: Dose; β -Pro7Ang III (0.1 mg/kg/day); animal info: Male 6–8 week old, unilateral ischemia-reperfusion injury model; β -Pro7Ang III is novel AT2 receptor agonist; (ischemia-reperfusion kidney injury); nephrology; "Administration of β -Pro7Ang III via mini-pump improved kidney structure and reduced interstitial collagen accumulation, in parallel with an alteration of macrophage phenotype and anti-inflammatory cytokine release, therefore mitigating the downstream progression of ischemic AKI."

Q11034: J. Zhang, *et al.* Identification of Novel Biomarkers for Abdominal Aortic Aneurysm Promoted by Obstructive Sleep Apnea. *Annals of Vascular Surgery* 2023;92(285-293)

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** apoE-/-; **Pump:** Not Stated; **Duration:** 28 days; **ALZET Comments:** Dose: 1,000 ng/min/kg; animal info: 8-10 weeks; cardiovascular; abdominal aortic aneurysm

Q11031: J. Youwakim, *et al.* Neurovascular Coupling in Hypertension Is Impaired by IL-17A through Oxidative Stress. *International Journal of Molecular Sciences* 2023;24(4):

Agents: Angiotensin II; interleukin 17A, recombinant **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1002; 1007D; **Duration:** 14 days; 7 days;

ALZET Comments: Dose: Ang II 600 ng/kg/min, IL-17A 50 pg/kg/h; Controls received mp w/ vehicle; animal info: male, 10-12 weeks old; Blood pressure measured via Tail cuff; Blood pressure results see (pg.2) cardiovascular; hypertension

Q10840: S. Yang, *et al.* Neutrophil Extracellular Traps Induce Abdominal Aortic Aneurysm Formation by Promoting the Synthetic and Proinflammatory Smooth Muscle Cell Phenotype via Hippo-YAP Pathway. *Translational Research* 2023;255(85-96)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 1004; **Duration:** 28 days; **ALZET Comments:** Dose (1000 ng/(kg min)); Controls received mp w/ vehicle; animal info (12-week-old male background; Blood pressure measurement (p.7) see Fig.3; Angiotensin II aka (Ang II); cardiovascular (abdominal aortic aneurysm)

Q11018: Y. Wang, *et al.* Moxonidine Increases Uptake of Oxidised Low-Density Lipoprotein in Cultured Vascular Smooth Muscle Cells and Inhibits Atherosclerosis in Apolipoprotein E-Deficient Mice. *International Journal of Molecular Sciences* 2023;24(4):

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** ApoE-/-; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose: (1 ug/kg body weight/min); animal info: Male 3 months old; cardiovascular; atherosclerosis

Q11022: Y. Wang, *et al.* CCN2 deficiency in smooth muscle cells triggers cell reprogramming and aggravates aneurysm development. *JCI Insight* 2023;8(1):

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** CCN2-floxed; **Pump:** 2006; 1007D; **Duration:** 42 days; 7 days;

ALZET Comments: Dose (500 ng/kg/min); Controls received mp w/ vehicle; Blood pressure measurements see (pg.5) Fig. 2E; cardiovascular; abdominal aortic aneurysm

Q11021: W. Wang, *et al.* Compound Kushen injection attenuates angiotensin II-mediated heart failure by inhibiting the PI3K/Akt pathway. *International Journal of Molecular Medicine* 2023;51(3):

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2004; **Duration:** 3 weeks; **ALZET Comments:** Dose Ang II (2 μ g/kg/min); Controls received mp w/ vehicle; animal info: Male, 6 weeks; weight, 20-22 g; cardiovascular; (heart failure)



Q10776: S. Wang, *et al.* Reactive Oxygen Species-Induced Long Intergenic Noncoding RNA p21 Accelerates Abdominal Aortic Aneurysm Formation by Promoting Secretary Smooth Muscle Cell Phenotypes. *Journal of Molecular and Cellular Cardiology* 2023;174(63-76

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6 J; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose (1.5 mg/kg/d); (0.9% NaCl) used; Controls received mp w/ vehicle; animal info (Ten- to 12-week-old male mice and 10- to 12-week-old male ApoE-/- mice); Blood pressure measured via vivo telemetric blood pressure measurements; Blood pressure measurement (p.6) Fig.8 D &E; Angiotensin II aka (Ang II) cardiovascular;

Q11017: M. Wang, *et al.* SIRT3 improved peroxisomes-mitochondria interplay and prevented cardiac hypertrophy via preserving PEX5 expression. *Redox Biology* 2023;62(102652

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** Sirt3 KO; **Pump:** 1002; **Duration:** 2 weeks; **ALZET Comments:** Dose (2 mg kg/d); 0.9% NaCl, used; Controls received mp w/ vehicle; animal info: adult male (10–12 weeks old)cardiovascular; cardiac hypertrophy

Q11019: J. C. Wang, *et al.* Hyperuricemia exacerbates abdominal aortic aneurysm formation through the URAT1/ERK/MMP-9 signaling pathway. *BMC Cardiovascular Disorders* 2023;23(1):55

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** ApoE-/-; **Pump:** 2004; **Duration:** 4 weeks; **ALZET Comments:** Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: Eight- to ten-week-old male; cardiovascular (abdominal aortic aneurysm)

Q10768: J. Wang, *et al.* TCF7L1 Accelerates Smooth Muscle Cell Phenotypic Switching and Aggravates Abdominal Aortic Aneurysms. *JACC: Basic to Translation Science* 2023;8(2):155-170

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** ApoE-/-; **Pump:** 1004; **Duration:** 28 days; **ALZET Comments:** Dose (1,000 ng/kg/min)(0.9% sodium chloride) used; animal info (Eight-week old mice); cardiovascular;

Q11010: Y. Tian, *et al.* The abdominal aortic aneurysm-related disease model based on machine learning predicts immunity and m1A/m5C/m6A/m7G epigenetic regulation. *Frontiers in Genetics* 2023;14(1131957

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** APOE-/-; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose (1000 ng/min/kg); Controls received mp w/ vehicle; animal info: 8 weeks; cardiovascular; abdominal aortic aneurysm

Q10690: K. Takahashi, *et al.* LOX-1 Deficiency Increases Ruptured Abdominal Aortic Aneurysm Via Thinning of Adventitial Collagen. *Hypertension Research* 2023;46(1):63-74

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 2004; **Duration:** 4 weeks; **ALZET Comments:** Dose (1.44 mg/kg/day); Controls received mp w/ vehicle; animal info: background (8-week-old male mice); post op. care (medetomidine, midazolam, and butorphanol (0.3, 4.0, and 5.0 mg/kg); Blood pressure measured via Tail cuff; Blood pressure measurement (pg.67) see Fig.1D; Angiotensin II aka (Ang II); cardiovascular (abdominal aortic aneurysm)

Q11008: L. Sun, *et al.* Purinergic receptor P2X7 contributes to abdominal aortic aneurysm development via modulating macrophage pyroptosis and inflammation. *Translational Research* 2023;258(72-85

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** ApoE-/-; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose: (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: 8–12-week-old; cardiovascular; Abdominal aortic aneurysm

Q10996: S. Shen, *et al.* Leonurine attenuates angiotensin II-induced cardiac injury and dysfunction via inhibiting MAPK and NF-kappaB pathway. *Phytomedicine* 2023;108(154519

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1002; **Duration:** 4 weeks; **ALZET Comments:** Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: non-hypertensive; Blood pressure measured via Tail cuff; Blood pressure measurement (p.2) Fig. 1C; cardiovascular; Therapeutic indication (Hypertensive heart failure);



Q10990: M. Salarian, *et al.* Homeostatic, Non-Canonical Role of Macrophage Elastase in Vascular Integrity. *Circulation Research* 2023;132(4):432-448

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** Apoe^{-/-}; Mmp12^{-/-}/Apoe^{-/-}; **Pump:** 2004; 2001; **Duration:** 4 weeks;

ALZET Comments: Dose (1000 ng/kg per minute); Controls received mp w/ vehicle; animal info: 12- to 14-week-old male; Blood pressure measured via: radiotelemetry; Blood pressure measurements see (pg.439) Fig.3 H; cardiovascular (abdominal aortic aneurysm)

Q10985: L. A. Ramirez, *et al.* Perinatal intermittent hypoxia increases early susceptibility to ANG II-induced hypertension in adult male but not in female Sprague-Dawley rats. *American Journal of Physiology Renal Physiology* 2023;324(5):F483-F493

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Strain:** Sprague-Dawley; **Pump:** 2001; **Duration:** 12 days;

ALZET Comments: Dose (400 ng/kg/min); animal info: Female 15 wk of age; Blood pressure measured via: telemetry; BP measurement results (see pg. 487); cardiovascular; hypertension, intermittent hypoxia

Q10974: Z. D. Pang, *et al.* YAP-galectin-3 signaling mediates endothelial dysfunction in angiotensin II-induced hypertension in mice. *Cellular & Molecular Life Sciences* 2023;80(2):38

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** Gal-3^{-/-}; **Pump:** 2002; **Duration:** 2 weeks;

ALZET Comments: Dose (0.75 mg/kg/day); Controls received mp w/ vehicle; animal info: male 8-week old; Blood pressure measured via tail cuff; cardiovascular (hypertension);

Q10975: P. Pang, *et al.* The circular RNA circHelz enhances cardiac fibrosis by facilitating the nuclear translocation of YAP1. *Translational Research* 2023;257(30-42

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2006; **Duration:** 8 weeks;

ALZET Comments: Dose (25 mg/ml); animal info: eight-week-old male C57BL/6; cardiovascular (cardiac fibrosis, myocardial infarction)

Q11063: K. Okuno, *et al.* Infused juice concentrate of Japanese plum *Prunus mume* attenuates inflammatory vascular remodeling in a mouse model of hypertension induced by angiotensin II. *Hypertension Research* 2023;46(8):1923-1933

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** Not Stated; **Duration:** 2 weeks;

ALZET Comments: Dose: 1000 ng/kg/min; controls received mp w/ vehicle; animal info: 8 to 10-week-old male; blood pressure measured via Tail cuff; blood pressure results (p.1929) Fig. 4; cardiovascular; hypertension

Q10970: A. Nenmar, *et al.* Assessment of the Hepatotoxicity of Intratracheally Instilled Silver Nanoparticles in Hypertensive Mice. *Hamdan Medical Journal* 2023;

Agents: Angiotensin II **Vehicle:** Saline; PEG; **Route:** SC; **Species:** Mice; **Strain:** BALB/c; **Pump:** 2006; **Duration:** Not Stated;

ALZET Comments: Dose (0.75 Mg/kg/day); Controls received mp w/ vehicle; animal info: Eight to 10-week-old mice both genders weighing 20–25 g; functionality of mp verified by Ang II plasma concentration; Blood pressure measured via: computer-based tail-cuff manometry system; 136 ± 2 mmHg - 81 ± 1 mmHg pg.4 (result); cardiovascular; (hypertension)

Q11061: A. Nemmar, *et al.* Impact of Intratracheal Administration of Polyethylene Glycol-Coated Silver Nanoparticles on the Heart of Normotensive and Hypertensive Mice. *International Journal of Molecular Sciences* 2023;24(10):

Agents: Angiotensin II **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice **Strain:** BALB/c; **Pump:** 2006; **Duration:** 28 days;

ALZET Comments: Dose (0.75 mg/kg/day); 0.15 mol/L NaCl and 0.01-N acetic acid used; controls received mp w/ vehicle; animal info: both sexes, aged 8 to 10 weeks, 20 to 25 g; blood pressure measured via tail cuff; blood pressure measurement results (p.4) Fig. 2; functionality of mp verified by plasma levels; cardiovascular (hypertension)

Q10969: A. Nemmar, *et al.* Waterpipe smoke inhalation potentiates cardiac oxidative stress, inflammation, mitochondrial dysfunction, apoptosis and autophagy in experimental hypertension. *Biomedicine & Pharmacotherapy* 2023;158(114144

Agents: Angiotensin II **Vehicle:** Saline; acetic acid; **Route:** SC; **Species:** Mice; **Strain:** BALB/c; **Pump:** 2006; **Duration:** 6 weeks;

ALZET Comments: Dose (0.75 mg/kg/day); animal info: both genders (6–8 weeks old); Blood pressure measured via: noninvasive tail-cuff manometry system; Blood pressure measurement results (see pg.4) Fig.1; cardiovascular; (hypertension)



Q10968: M. Navas-Madronal, *et al.* Targeting mitochondrial stress with Szeto-Schiller 31 prevents experimental abdominal aortic aneurysm: Crosstalk with endoplasmic reticulum stress. *British Journal of Clinical Pharmacology* 2023;180(17):2230-2249
Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** ApoE^{-/-}; ApoE^{-/-}/CHOP^{+/+} (C57BL/6J); **Pump:** 1004; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: 11 wk male female; post op. care (Antibiotics (penicillin 450,000 µg/kg, intramuscular) and analgesics (buprenorphine 0.05 mg/kg subcutaneous) were given immediately after surgery to prevent infection and discomfort); Blood pressure measured via: tail-cuff plethysmography method; Blood pressure measurements (see pg.8) table 1; cardiovascular (abdominal aortic aneurysm)

Q11058: L. Medzikovic, *et al.* Myocardial fibrosis and calcification are attenuated by microRNA-129-5p targeting Asporin and Sox9 in cardiac fibroblasts. *JCI Insight* 2023;8(9):

Agents: Angiotensin II **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 1004; **Duration:** 4 weeks;
ALZET Comments: Dose (1.5 mg/kg/day); controls received mp w/ vehicle; animal info (male 8- to 10-week-old; post op. care: Buprenorphine; cardiovascular; myocardial fibrosis, cardiac hypertrophy; "Chronic AngII infusion enhanced myocardial fibrosis, which was significantly lower in hearts of miR-129-5p-injected mice. We furthermore observed that chronic AngII infusion was able to induce expression of osteogenic genes Runx2 and Alp3 in the LV, both of which were significantly decreased upon miR-129-5p injections." p.8

Q11056: D. Matsiukevich, *et al.* Characterization of a robust mouse model of heart failure with preserved ejection fraction. *American Journal of Physiology Heart and Circulatory Physiology* 2023;325(2):H203-H231

Agents: Angiotensin II; phenylephrine **Vehicle:** Saline; **Route:** CSF/CNS; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 2004; 1002; **Duration:** 28 days; 3 days; 10 days;

ALZET Comments: Dose (1.5 µg/g/day ang II); (50 µg/g/day PE), pumps primed in 0.9% saline 24h 37degC; controls received mp w/ vehicle; animal info: 8- to 10-wk old; blood pressure measured via Noninvasive Methods; blood pressure measurement results see (p.212) Fig.3 L; behavioral testing (Treadmill exercise); cardiovascular (heart failure)

Q11085: Z. Li, *et al.* Smooth muscle alpha(v) integrins regulate vascular fibrosis via CD109 downregulation of TGF-beta signalling. *European Heart Journal Open* 2023;3(2):oead010

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** Itgavflox/flox/ SM22-CreERT2(ki)/+; **Pump:** Not Stated; **Duration:** 28 days;

ALZET Comments: Dose (1.5 mg/kg/day); animal info (Male and female; 8-10 months old); Blood pressure measured via tail-cuff method;

Q11052: Y. Li, *et al.* Taxifolin ameliorates abdominal aortic aneurysm by preventing inflammation and apoptosis and extracellular matrix degradation via inactivating TLR4/NF-kappaB axis. *International Immunopharmacology* 2023;119(110197

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** apoE^{-/-}; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose (1 µg/kg/min); animal info: ApoE gene knockout, 10–12 weeks old; cardiovascular; therapeutic indication (Abdominal aortic aneurysm);

Q11051: J. C. Li, *et al.* Angiotensin II mediates hypertensive cardiac fibrosis via an Erbb4-IR-dependent mechanism. *Molecular Therapy Nucleic Acids* 2023;33(180-190

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1.46 mg/kg/day); controls received mp w/ vehicle; animal info: age of 8–10 weeks; blood pressure measured via noninvasive tail cuff; Blood pressure measurement results see (p.181) Fig.1 C; cardiovascular, Hypertensive cardiovascular disease; "Indeed, chronic Ang II infusion markedly upregulated cardiac Erbb4-IR, which was associated with hypertension and development of hypertensive cardiac disease, as demonstrated by significant reductions in LVEF and LVFS and increases in LV mass and cardiac fibrosis." p.4

Q11047: A. Kopacz, *et al.* Co-administration of angiotensin II and simvastatin triggers kidney injury upon heme oxygenase-1 deficiency. *Free Radical Biology and Medicine* 2023;205(188-201

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** HO-1 KO; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose: (2500 ng/kg/min); controls received mp w/ vehicle; animal info: 6-month-old; nephrology



Q10556: X. Y. Jiang, *et al.* Cardiac-Specific Trim44 Knockout In Rat Attenuates Isoproterenol-Induced Cardiac Remodeling Via Inhibition Of AKT/mTOR Pathway. *Moving Heart Failure to Heart Success: Mechanisms, Regeneration & Therapy* 2023;16(5):
Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Strain:** Sprague Dawley, wild-type; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose: Ang II (0.3 mg/kg/day); Controls received empty mp; animal info: rats 2.5 months of age Angiotensin II aka (Ang II); cardiovascular;

Q11042: P. Jia, *et al.* Liensinine improves AngII-induced vascular remodeling via MAPK/TGF-beta1/Smad2/3 signaling. *Journal of Ethnopharmacology* 2023;317(116768

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** Not Stated; **Duration:** Not Stated; **ALZET Comments:** Dose: (500 ng/kg/min); controls received mp w/ vehicle; animal info (6-8 weeks; spf male; blood pressure measured via Kent non-invasive caudal system; Blood pressure results see (p.6) cardiovascular; hypertension

Q10565: Z. P. Jara, *et al.* Distinct Mechanisms of beta-Arrestin-Biased Agonist and Blocker of AT1R in Preventing Aortic Aneurysm and Associated Mortality. *Hypertension* 2023;80(2):385-402

Agents: Angiotensin II; TRV027; Olmesartan **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** ApoE-/-; **Pump:** 2001; **Duration:** 28 days;

ALZET Comments: Dose (1.4 µmol/g AngII, 1.4 umol/g TRV027, 1.4 umol/ OLM); Controls received mp w/ vehicle; animal info (Male and female mice; 8-10 weeks old; Fed high-fat diet); Blood pressure measured via tail-cuff method; TRV027 is a B-arrestin biased ligand; peptides; cardiovascular;

Q10946: Z. Huang, *et al.* Mouse endothelial OTUD1 promotes angiotensin II-induced vascular remodeling by deubiquitinating SMAD3. *EMBO Reports* 2023;24(3):e56135

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** OTUD1-/-; **Pump:** 1004; **Duration:** 4 weeks;

ALZET Comments: Dose (1,000 ng/kg/min); Controls received mp w/ vehicle; animal info (8- week-old male mice (including WT and OTUD1 mice); Blood pressure measured via Tail cuff; cardiovascular (vascular injury; hypertension);

Q11039: J. Huang, *et al.* Effects of Mineralocorticoid Receptor Blockade and Statins on Kidney Injury Marker 1 (KIM-1) in Female Rats Receiving L-NAME and Angiotensin II. *International Journal of Molecular Sciences* 2023;24(7):

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Rat; **Strain:** Wistar; **Pump:** 2001; **Duration:** 2 days; 3 days;

ALZET Comments: Dose (225 ug/kg/day); animal info: 8–10-week-old female weighing 180 to 260 g; blood pressure measured via Tail cuff; nephrology; good methods: "Concentrations of ANG II to fill the minipumps were calculated based on the mean pump rate provided by the manufacturer and the body weight of the animals on the day prior to implantation of the pump."

Q10914: T. Zou, *et al.* Moricizine Prevents Atrial Fibrillation by Late Sodium Current Inhibition in Atrial Myocytes. *Journal of Thoracic Disease* 2022;14(6):2187-2200

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** Wildtype, C57BL/6; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose (750 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 6-8 weeks old); peptides; cardiovascular; no stress: "The mortality rate of all three groups was 0%, and there was no difference in wound healing or infection following implantation of the mini pump." pg. 2189

Q10909: J. Zhu, *et al.* Deficiency of Cystathionine Gamma-Lyase Promotes Aortic Elastolysis and Medial Degeneration in Aged Mice. *Journal of Molecular and Cellular Cardiology* 2022;171(30-44

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** CSE-KO; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1µg/kg/min); Controls received mp w/ vehicle; animal info (Male; 56 weeks old); Blood pressure measured via noninvasive tail-cuff method; peptides; cardiovascular;

Q11037: H. Zhu, *et al.* Integrin subunit beta-like 1 mediates angiotensin II-induced myocardial fibrosis by regulating the forkhead box Q1/Snail axis. *Archives of Biochemistry and Biophysics* 2022;730(109422

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Strain:** Not Stated; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose (1.5 mg/kg/day); Controls received mp w/ vehicle; animal info: male mice 8-week-old, 20–25g; cardiovascular;



Q10905: Z. Zhou, *et al.* Excessive DNA Damage Mediates ECM Degradation via the RBBP8/NOTCH1 Pathway in Sporadic Aortic Dissection. *BBA -Molecular Basis of Disease* 2022;1868(2):166303

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1007D; **Duration:** 3; 7; 14; 28 days;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 10-weeks old); peptides; cardiovascular;

Q10906: Y. Zhou, *et al.* Overexpressed DDX3x Promotes Abdominal Aortic Aneurysm Formation and Activates AKT in ApoE Knockout Mice. *Biochemical and Biophysical Research Communication* 2022;634(138-144

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (C57BL/6J Male; Apolipoprotein E deficient; 12-16 weeks old); peptides; cardiovascular;

Q10889: W. Zhao, *et al.* Endothelial Cyclin I Reduces Vulnerability to Angiotensin II-Induced Vascular Remodeling and Abdominal Aortic Aneurysm Risk. *Microvascular Research* 2022;142(104348

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 28 days;

ALZET Comments: Dose (0.4 mg/kg/day); Controls received mp w/ vehicle; Animal Info (Wild-type, 16-22 wk old male); Blood Pressure Measured via Tail Cuff Method; Peptides; Cardiovascular;

Q10888: G. Zhao, *et al.* BAF60c Prevents Abdominal Aortic Aneurysm Formation Through Epigenetic Control of Vascular Smooth Muscle Cell Homeostasis. *Journal of Clinical Investigation* 2022;132(21):

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose: (1000ng/kg/min); 2% heparin vehicle used animal info: 16-week-old male Baf60cSMKO/Apoe^{-/-} and Baf60cf/f/Apoe^{-/-} mice; Blood pressure measured via: non-invasive tail-cuff method; Blood pressure result see diagram (pg.45 fig.2); cardiovascular; (Abdominal aortic; "Together, our identification of the essential role of BAF60c in preserving VSMC homeostasis expands its therapeutic potential in preventing and treating AAA." (pg.3)

Q10873: Z. Y. Zhang, *et al.* Knockdown of CD146 Promotes Endothelial-to-Mesenchymal Transition Via Wnt/beta-Catenin Pathway. *PLoS One* 2022;17(8):e0273542

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days; 28 days;

ALZET Comments: Dose (1.4 mg/kg/day); Controls received mp w/ vehicle; animal info (C57BL/6 Male; 8-9 weeks old); post op. care (Buprenorphine 0.1 mg/kg); Blood pressure measured via noninvasive tail-cuff method; peptides; cardiovascular;

Q10874: Z. Zhang, *et al.* Elabela Alleviates Ferroptosis, Myocardial Remodeling, Fibrosis and Heart Dysfunction in Hypertensive Mice by Modulating the IL-6/STAT3/GPX4 Signaling. *Free Radical Biology & Medicine* 2022;181(130-142

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Pump:** 1002; **Duration:** 2 weeks;

ALZET Comments: Dose (1.5 mg/kg/d); Controls received mp w/ vehicle; animal info (C57BL/6 Male; 10 weeks old; Wild-type); Blood pressure measured via tail-cuff method; peptides; cardiovascular; Therapeutic indication (Hypertensive heart diseases);

Q10871: X. Zhang, *et al.* SLC7A11/xCT Prevents Cardiac Hypertrophy by Inhibiting Ferroptosis. *Cardiovascular Drugs and Therapy* 2022;36(3):437-447

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;

ALZET Comments: Dose: (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: Male C57BL/6 mice 8–10 week-old; Blood pressure measured via: tail-cuff method with the CODA noninvasive BP system; blood pressure measurements (see pg. 8 fig.5); cardiovascular; hypertension; pump labelled incorrectly as 1002D

Q10867: R. Zhang, *et al.* METTL3 Mediates Ang-II-Induced Cardiac Hypertrophy Through Accelerating Pri-miR-221/222 Maturation In An m6A-Dependent Manner. *Cellular & Molecular Biology Letters* 2022;27(1):55

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 3 weeks;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (C57BL/6 Male; 5-9 weeks old); peptides; cardiovascular; Therapeutic indication (Myocardial hypertrophy);



Q10862: N. Zhang, *et al.* An Unexpected Role for BAG3 in Regulating PARP1 Ubiquitination in Oxidative Stress-Related Endothelial Damage. *Redox Biology* 2022;50(102238)

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2002; **Duration:** 2 weeks;

ALZET Comments: Dose (1.5 mg/kg/day); animal info (Male; 8-10 weeks old); peptides; cardiovascular; Therapeutic indication (Oxidative stress-associated endothelial damage);

Q10866: L. Zhang, *et al.* Effects of Thymoquinone Against Angiotensin II-Induced Cardiac Damage in Apolipoprotein E-Deficient Mice. *International Journal of Molecular Medicine* 2022;49(5):

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose: (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: ApoE^{-/-} male mice (n=30; weight, 24.30±1.04 g); Blood pressure measured via: tail-cuff system; Blood pressure measurement result see graph (p.4) fig.d; cardiovascular;

Q10865: J. Zhang, *et al.* Ca(2+)/Calmodulin-Dependent Protein Kinase II Regulation by Inhibitor of RIPK3 Protects against Cardiac Hypertrophy. *Oxidative Medicine and Cellular Longevity* 2022;2022(7941374)

Agents: Angiotensin II **Vehicle:** PBS; **Route:** IP; SC; **Species:** Mice; **Pump:** 2002; **Duration:** 2 weeks;

ALZET Comments: Dose (2.5 ug/kg/min; Controls received mp w/ vehicle; animal info (RIPK3^{-/-}, WT); peptides; cardiovascular; Therapeutic indication (Hypertrophic cardiomyopathy);

Q10863: D. Zhang, *et al.* Inhibition of XIIST Attenuates Abdominal Aortic Aneurysm in Mice by Regulating Apoptosis of Vascular Smooth Muscle Cells Through miR-762/MAP2K4 Axis. *Microvascular Research* 2022;140(104299)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** IP; **Species:** Mice; **Pump:** Not Stated; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (ApoE^{-/-}); peptides; cardiovascular;

Q10856: J. Yuan, *et al.* Inhibition of Wdr5 Attenuates Ang-II-Induced Fibroblast-to-Myofibroblast Transition in Cardiac Fibrosis by Regulating Mdm2/P53/P21 Pathway. *Biomolecules* 2022;12(11):

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose: (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: Eight-week old C57/B6 mice (male, bodyweight: 23 +/- 2 g); Blood pressure measured via non-invasive tail-cuff; Blood pressure measurement (p.13) see fig.7 (E,F); cardiovascular (cardiac fibrosis)

Q10851: L. M. Yu, *et al.* Activation of PKG-CREB-KLF15 by Melatonin Attenuates Angiotensin II-Induced Vulnerability to Atrial Fibrillation via Enhancing Branched-Chain Amino Acids Catabolism. *Free Radical Biology & Medicine* 2022;178(202-214)

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose (2000 ng/kg/min); animal info (C57/BL6 Male; 10 weeks of age); peptides; ischemia (cardiac); cardiovascular; Therapeutic indication (Atrial fibrillation);

Q10852: F. Yu, *et al.* Chronic Reduction of Store Operated Ca(2+) Entry is Viable Therapeutically but is Associated with Cardiovascular Complications. *The Journal of Physiology* 2022;600(22):4827-4848

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 2 weeks;

ALZET Comments: Dose (2 ng/min/g); 0.9% saline vehicle used; Controls received mp w/ vehicle; animal info: Male mice (8 weeks old); Blood pressure measured via Tail cuff; Blood pressure measurement (p.4842) Fig. 5;

Q10847: A. Yin, *et al.* Exercise-Derived Peptide Protects Against Pathological Cardiac Remodeling. *EBioMedicine* 2022;82(104164)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose: (1.5mg/kg/day); Controls received mp w/ vehicle; animal info: Eight-week-old C57BL/6 male mice (22-25 g); Blood pressure measured via: tail cuff (Male systolic) 118.7 - 5.7mmHg (Female systolic) 112.8 - 5.9 mmHg. (Male diastolic) 74.2 - 7.2 mmHg (Female diastolic) 70.8 - 5.0 mmHg (see pg.4); cardiovascular; "The results provide new insights into exercise-afforded cardio protection in pathological cardiac remodeling and highlight the therapeutic potential of CCDC80tide in heart failure treatment." (pg.1)



Q10841: T. Yang, *et al.* Cell-Specific Actions of the Prostaglandin E-Prostanoid Receptor 4 Attenuating Hypertension: A Dominant Role for Kidney Epithelial Cells Compared With Macrophages. *Journal of the American Heart Association* 2022;11(19):e026581

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 3 weeks;

ALZET Comments: Dose (1000 ng/kg/min); animal info (C57BL/6 male mice background); Blood pressure measured via radiotelemetry; Blood pressure measurement (p.6) see fig. 1; Angiotensin II aka (Ang II)cardiovascular;

Q10839: L. Yang, *et al.* MiR-30c-1-3p Targets Matrix Metalloproteinase 9 Involved in the Rupture of Abdominal Aortic Aneurysms. *Journal of Molecular Medicine (Berl)* 2022;100(8):1209-1221

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;

ALZET Comments: Dose (1 ug/kg/min); Controls received mp w/ vehicle; animal info ApoE-/- (Male; 6-8 weeks old; Weighed 20-25 g; Fed western diet for 4 weeks); Blood pressure measured via tail-cuff method; peptides; cardiovascular; (abdominal aortic aneurysm)

Q10837: B. Yang, *et al.* Ventricular SK2 Upregulation Following Angiotensin II Challenge: Modulation by p21-Activated Kinase-1. *Journal of Molecular and Cellular Cardiology* 2022;164(110-125

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days;

ALZET Comments: Dose (1 ug/g/d); animal info. PAK1f/f; PAK1cko mice; peptides; cardiovascular (cardiac hypertrophy)

Q10832: P. Xu, *et al.* Erythrocyte Transglutaminase-2 Combats Hypoxia and Chronic Kidney Disease by Promoting Oxygen Delivery and Carnitine Homeostasis. *Cell Metabolism* 2022;34(2):299-316 e6

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** Angiotensin II;

ALZET Comments: Dose: (500 ng/kg/min)Controls received mp w/ vehicle; animal info: Eight to 12 weeks, age matched male EpoR-Cre+ mice and Tgm2flox/flox EpoR-Cre+ mutant mice; Blood pressure measured via: tail cuff; Blood pressure measurements (p.309) see fig.5b; Angiotensin II aka (Ang II)

Q10808: H. Xu, *et al.* KLF4 Prevented Angiotensin II-Induced Smooth Muscle Cell Senescence by Enhancing Autophagic Activity. *European Society for Clinical Investigation Journal Foundation* 2022;52(9):e13804

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 4 weeks;

ALZET Comments: Dose: (1.0 µg/kg/min);Controls received mp w/ vehicle; animal info: 2-month-old maleC57BL/6 mice (23.2 ± 0.8 g)Angiotensin II aka (Ang II)cardiovascular;

Q10806: X. Xie, *et al.* Melatonin Inhibits Angiotensin II-Induced Atrial Fibrillation Through Preventing Degradation of Ang II Type I Receptor-Associated Protein (ATRAP). *Biochemical Pharmacology* 2022;202(115146

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Pump:** 1004; **Duration:** 3 weeks;

ALZET Comments: Dose (2000 ng/kg/min); 2% ethanol in saline used; Controls received mp w/ vehicle; animal info C57BL/6 (8 weeks old); peptides; cardiovascular;

Q10805: L. Xie, *et al.* Uncaria Rhynchophylla attenuates angiotensin II-induced myocardial fibrosis via suppression of the RhoA/ROCK1 pathway. *Biomed Pharmacother* 2022;146(112607

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose (500 ng/kg/min); Controls received mp w/ vehicle; animal info C57BL/6 (Male; Weigh 25-30 g; 10-16 weeks old); Blood pressure measured via tail-cuff plethysmograph method; peptides; cardiovascular;

Q10800: T. C. Wu, *et al.* Tolvaptan Reduces Angiotensin II-Induced Experimental Abdominal Aortic Aneurysm and Dissection. *Vascular Pharmacology* 2022;144(106973

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info C57BL/6 (Male; 12-14 weeks old Apo-E knockout mice C57BL/6 background); Blood pressure measured via noninvasive tail-cuff system; peptides; cardiovascular; Therapeutic indication (Abdominal aortic aneurysm);



Q10798: Q. Q. Wu, *et al.* Tax1 Banding Protein 1 Exacerbates Heart Failure in Mice by Activating ITCH-P73-BNIP3-Mediated Cardiomyocyte Apoptosis. *Acta Pharmacologica Sinica* 2022;43(10):2562-2572

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose (1.4 mg/kg/day); 0.9% NaCl; Controls received mp w/ vehicle; animal info C57BL/6J (Male; 8-10 weeks old); peptides; cardiovascular; Therapeutic indication (Heart Failure);

Q10796: C. Woods, *et al.* Estrogen Receptor Beta Activity Contributes to Both Tumor Necrosis Factor Alpha Expression in the Hypothalamic Paraventricular Nucleus and the Resistance to Hypertension Following Angiotensin II in Female Mice. *Neurochemistry International* 2022;161(105420)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days;

ALZET Comments: Dose (600 ng/kg/min); Controls received mp w/ vehicle; animal info C57BL/6 (Female; Male; Wild-type); Blood pressure measured via tail-cuff method; peptides; cardiovascular;

Q10780: Z. Wang, *et al.* RNA Sequencing Reveals Perivascular Adipose Tissue Plasticity in Response to Angiotensin II. *Pharmacological Research* 2022;178(106183)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 7 Days;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info C57BL/6J (Wild type; 12 weeks old); peptides; cardiovascular;

Q10778: Y. Wang, *et al.* G-Protein Coupled Receptor 30 Attenuates Myocardial Hypertrophy by Reducing Oxidative Stress and Apoptosis in Ang II-Treated Mice. *Peptides* 2022;157(170878)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1.44 mg/kg/day); Controls received mp w/ vehicle; animal info C57BL/6J (Female WT or G-protein coupled receptor 30 KO C57BL/6 8-10 weeks old); peptides; cardiovascular;

Q10779: Y. Wang, *et al.* Interleukin-22 Deficiency Reduces Angiotensin II-Induced Aortic Dissection and Abdominal Aortic Aneurysm in ApoE^{-/-} Mice. *Oxidative Medicine and Cellular Longevity* 2022;2022(7555492)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info: C57BL/6J ApoE^{-/-} and IL-22^{-/-} ages 9-10 weeks; Blood pressure measured via tail-cuff method; peptides; cardiovascular; Therapeutic indication (Abdominal aortic aneurysm; Aortic dissection);

Q10775: S. Wang, *et al.* CXCL1-CXCR2 Signaling Mediates Hypertensive Retinopathy by Inducing Macrophage Infiltration. *Redox Biology* 2022;56(102438)

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 1007D; 1004; **Duration:** 1 week; 3 weeks;

ALZET Comments: Dose: (3000 ng/kg/min); Controls received mp w/ vehicle; animal info: WT C57BL6J mice and CXCR2 KO mice; Blood pressure measured via: tail-cuff system; 126 ± 14 mmHg- 76 ± 8 mmHg; Angiotensin II aka (Ang II); cardiovascular (Hypertension)

Q10771: P. Wang, *et al.* Protective Effect of Vasostatin-1 Plasmid-Like Nanoparticles on Aortic Aneurysm and its Mechanism. *Bioengineered* 2022;13(1):544-559

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); animal info ApoE^{-/-} (8 weeks old; Weighed 20-22 g); peptides; cardiovascular;

Q10763: M. Wang, *et al.* Improved Renal Denervation Mitigated Hypertension Induced by Angiotensin II Infusion. *Journal of Visualized Experiments* 2022;183);

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** Not Stated;

ALZET Comments: Dose: (1,000 ng/kg/min) Controls received mp w/ vehicle; animal info: 14-week-old C57BL/6 mice; post op. care: povidone-iodine; warmed electric blanket for recovery and post-operative monitoring; meloxicam (0.5 mg/kg, SC); Blood pressure measured via: Tail cuff; Blood pressure measurements (p.6) see fig. 2; Angiotensin II aka (Ang II); good methods see pg. 3; cardiovascular; Hypertension



Q10770: M. Wang, *et al.* Diacerein Alleviates Ang II-Induced Cardiac Inflammation And Remodeling By Inhibiting The MAPKs/c-Myc Pathway. *Phytomedicine* 2022;106(154387

Agents: Angiotensin II **Vehicle:** Sodium carboxymethyl cellulose; **Route:** SC; **Species:** Mice; **Pump:** 1004; **Duration:** 4 weeks;
ALZET Comments: Dose (1000 ng/kg/min Angiotensin); animal info C57BL/6 (Male; 6 weeks old); post op. care (Neomycin); Blood pressure measured via tail-cuff method; peptides; cardiovascular; Therapeutic indication (Hypertension);

Q10762: L. Wang, *et al.* Therapeutic Aptamer Targeting Sclerostin Loop3 For Promoting Bone Formation Without Increasing Cardiovascular Risk in Osteogenesis Imperfecta Mice. *Theranostics* 2022;12(13):5645-5674

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 4 weeks;
ALZET Comments: Dose: (500 ng/kg/min) Controls received mp w/ vehicle; animal info: three-month-old Col1a2+/G610C.ApoE-/- mice, hSOSTki.Col1a2+/G610C.ApoE-/- mice, and Δloop3-hSOSTki. Col1a2+/G610C.ApoE-/- mice; Angiotensin II aka (Ang II)cardiovascular;

Q10769: L. Wang, *et al.* Substitution of SERCA2 Cys(674) Accelerates Aortic Aneurysm By Inducing Endoplasmic Reticulum Stress And Promoting Cell Apoptosis. *British Pharmacological Society* 2022;179(17):4423-4439

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 7 days;
ALZET Comments: Dose: (1.44 mg/kg/day); Controls received mp w/ vehicle; animal info: Male mice in Ldlr / background at 7 weeks old (18–22 g); post op. care: The incision was sealed with sterile sutures and disinfected with iodophor. Carprofen (5 mg kg 1, i.p.) was given to the mice the first day after surgery; Angiotensin II aka (Ang II)cardiovascular; Aortic aneurysm

Q10767: G. Wang, *et al.* Angiotensin II Infusion Results in Both Hypertension and Increased AMPA GluA1 Signaling in Hypothalamic Paraventricular Nucleus of Male but not Female Mice. *Neuroscience* 2022;485(129-144

Agents: Angiotensin II **Vehicle:** BSA; Saline; **Route:** SC; **Species:** Mice; **Pump:** Not Stated; **Duration:** 14 days;
ALZET Comments: Dose (600 ng/kg/min); 0.1% BSA; 0.9% saline; Controls received mp w/ vehicle; animal info C57BL/6 (Male; Female); Blood pressure measured via Hatteras MC-4000 tail-cuff blood pressure system; peptides; cardiovascular;

Q10765: B. Wang, *et al.* Loss of BTK Ameliorates the Pathological Cardiac Fibrosis and Dysfunction. *Matrix Biology* 2022;112(171-189

Agents: Angiotensin II **Vehicle:** Saline, sterile; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;
ALZET Comments: Dose: Ang II (1000 ng/kg/min); ISO (15 mg/kg/d); Controls received mp w/ vehicle; animal info: 8-10-week-old mice BTK KO or WT; post op. care: mice were placed on a warm pad at 37 °C until full consciousness was regained; Angiotensin II aka (Ang II); cardiovascular;

Q10766: B. Wang, *et al.* Loss of KDM5B Ameliorates Pathological Cardiac Fibrosis and Dysfunction by Epigenetically Enhancing ATF3 Expression. *Experimental & Molecular Medicine* 2022;54(12):2175-2187

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days;
ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Wild-type C57BL/6 mice), 8–10-week-old male mice; post op. care (Mice were positioned on a warming pad at 37 °C until full consciousness was restored); Angiotensin II aka (Ang II); cardiovascular;

Q10723: E. Walsh-Wilkinson, *et al.* Age and Sex Hormones Modulate Left Ventricle Regional Response to Angiotensin II in Male and Female Mice. *American Journal of Physiology* 2022;323(4):H643-H658

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Pump:** 2004; **Duration:** 28 days; 14 days;
ALZET Comments: Dose (1.5 mg/kg/day); Controls received mp w/ vehicle; animal info (C57BL/6J male female 7 wk old gonadectomized); peptides; cardiovascular (heart failure)

Q10718: A. E. Vendrov, *et al.* Renal NOXA1/NOX1 Signaling Regulates Epithelial Sodium Channel and Sodium Retention in Angiotensin II-induced Hypertension. *Antioxidants & Redox Signaling* 2022;36(7-9):550-566

Agents: Angiotensin II **Vehicle:** Sodium chloride; **Route:** SC; **Species:** Mice; **Pump:** 1002; **Duration:** 14 days;
ALZET Comments: Dose (500 ng/kg/min); 0.9% NaCl used; animal info (male; bred in-house; 4-months old; surgically implanted with systemic BP transmitters); blood pressure measured via telemetry; peptides; cardiovascular (hypertension)