

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

Q11355: S. Liu, *et al.* 3, 4-Benzopyrene (Bap) aggravated abdominal aortic aneurysm formation by targeting pyroptosis in smooth muscle cells through ET-1 mediated NLRP3-inflammasome activation. International Immunopharmacology 2023;124(Pt A):110851

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2006; **Duration:** 6 weeks; **ALZET Comments:** Dose (0.9 mg/kg/day); controls received mp w/ vehicle; animal info (Male; 8-10 months old; Weighed 30-35 g); blood pressure measured via tail-cuff method; wound clips used; peptides; cardiovascular

Q11353: C. P. Lin, *et al.* Tributyrin Intake Attenuates Angiotensin II-Induced Abdominal Aortic Aneurysm in LDLR(-/-) Mice. International Journal of Molecular Sciences 2023;24(9):

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Mice; **Strain:** LDLR-/-; C57BL/6J background; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); animal info (Male 14-16 weeks of age); Blood pressure results see (pg. 3) table 1;

Q11346: C. Lee, *et al.* Inhibition of miR-25 Ameliorates Cardiac Dysfunction and Fibrosis by Restoring Kruppel-like Factor 4 Expression. International Journal of Molecular Sciences 2023;24(15):

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1002; **Duration:** 4 weeks; **ALZET Comments:** Dose (3 mg/kg/day); animal info (Male; 8 weeks old; Weighed about 20-25 g); peptides; cardiovascular

R0459: S. Cheng, et al. Role of RIPK3-CaMKII-mPTP signaling pathway-mediated necroptosis in cardiovascular diseases (Review). INTERNATIONAL JOURNAL OF MOLECULAR MEDICINE 2023;52(98):

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

ALZET Comments: peptides; cardiovascular (hypertrophic cardiomyopathy); "The study revealed that, compared with those in the mice without myocardial hypertrophy (infusion of phosphate buffered solution), the levels of RIPK3 in HcM mice were markedly increased, and the levels of both the oxidation and phosphorylation of caMKII δ were also increased."

Q11319: 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; **ALZET Comments:** Dose (Ang II 225 ug/kg/day; L-NAME 0.2 mg/mL); controls received mp w/ vehicle; animal info (Female; 8-10 weeks old; Weighed 180-260 g); blood pressure measured via tail cuff method; enzyme inhibitor (Nitric Oxide Synthetase); peptides; cardiovascular; nephrology; good methods (used lot specific info to calculate concentration);

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; cardiovascular (abdominal aortic aneurysm)

Q11220: N. Yang, *et al.* Sclareol attenuates angiotensin II-induced cardiac remodeling and inflammation via inhibiting MAPK signaling. Phytotherapy Research 2023;37(2):578-591

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1004; **Duration:** 28 days; **ALZET Comments:** Dose: Ang II 1,000 ng/kg/min; Controls received mp w/ vehicle; animal info: male 18–22 g; post op. care: disinfection treatment, 1 g/L neomycin in drinking water; Blood pressure measured via: tail cuff; Blood pressure measurement results (see pg. 3) Fig.1B; cardiovascular;

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 μg/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

Q11224: L. H. Tanriverdi, et al. Activation of the Mas receptors by AVE0991 and MrgD receptor using alamandine to limit the deleterious effects of Ang II-induced hypertension. Fundamental and Clinical Pharmacology 2023;37(1):60-74

Agents: Angiotensin II **Vehicle:** Saline; DMSO; **Route:** SC; IP; **Species:** Rat; **Strain:** Sprague-Dawley; **Pump:** 2004; **Duration:** 40 days;

ALZET Comments: Dose: Ang II (80 ng/kg/min); animal info: 12–16 weeks 300–400 g, Blood pressure measured via: tail-cuff plethysmography; Blood pressure measurement results (see pg.63 fig. 1; cardiovascular; mentions prev study where Ang II delivered for 2 wks at 200 ng/kg/min

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 - 99.4 (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 μ g/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 AnglI infusion enhanced myocardial fibrosis, which was significantly lower in hearts of miR–129-5p–injected mice. We furthermore observed that chronic AnglI 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 μ g/g/day ang II); (50 μ g/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)

Q11187: Y. Liu, *et al.* MicroRNA-145 Attenuates Cardiac Fibrosis Via Regulating Mitogen-Activated Protein Kinase Kinase Kinase 3. Cardiovascular Drugs and Therapy 2023;37(4):655-665

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** MiR-145 TG; **Pump:** 2004; **Duration:** 4 weeks; **ALZET Comments:** Dose: (1.44 mg/kg/day)Controls received mp w/ vehicle; animal info: 8- to 10-week-old male MiR-145 TG mice (22-25 g)post op. care: The incision was closed and the mice were placed on the warming pad until fully awake cardiovascular;

Q11140: X. J. Liu, *et al.* Minocycline and Pyrrolidine Dithiocarbamate Attenuate Hypertension via Suppressing Activation of Microglia in the Hypothalamic Paraventricular Nucleus. Tohoku Journal of Experimental Medicine 2023;259(2):163-172 **Agents:** Angiotensin II **Vehicle:** Saline; **Route:** IV (femoral; vena cava); **Species:** Rat; **Strain:** Sprague Dawley;

Pump: Not Stated; **Duration:** 4 weeks;

ALZET Comments: Dose (0.6 µg/hr); 0.3% NaCl used; Controls received mp w/ vehicle; animal info (Male; Weighed 275-300 g); peptides; polyethylene catheter; cardiovascular (hypertension)

Q11139: Q. Liu, et al. Identification of a novel small-molecule inhibitor of miR-29b attenuates muscle atrophy. Molecular Therapy: Nucleic Acids 2023;31(527-540

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 2001; **Duration:** Not Stated; **ALZET Comments:** Dose (2 ug/uL); Controls received mp w/ vehicle; animal info (Male; 8-10 weeks old); peptides;

Q11192: J. Liu, *et al.* Therapeutic Effects of Salvianolic Acid B on Angiotensin II-Induced Atrial Fibrosis by Regulating Atrium Metabolism via Targeting AMPK/FoxO1/miR-148a-3p Axis. Journal of Cardiovascular Translational Research 2023;16(2):341-357 **Agents:** Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Strain:** BALB/c; **Pump:** 2004; **Duration:** 4 weeks; **ALZET Comments:** Dose: (1.0 mg/kg/min)Controls received mp w/ vehicle; animal info: Eight-week-old male body weight 22–25 g; cardiovascular; Atrial fibrillation

Q11085: Z. Li, et al. Smooth muscle alpha(v) integrins regulate vascular fibrosis via CD109 downregulation of TGF-beta signaling. 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);

Q11135: M. Li, *et al.* Baicalin mitigates hypertension-linked alterations in the intestinal lymphatic vasculature in part through preserving the functional barrier integrity of lymphatic endothelial cells. Biomedicine & Pharmacotherapy 2023;160(**Agents:** Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 1002; **Duration:** 2 weeks; **ALZET Comments:** Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 8 weeks old; Weighed about 25 g); Blood pressure measured via tail-cuff method; peptides; cardiovascular;

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

Q11127: S. Kurose, *et al.* Interleukin-38 suppresses abdominal aortic aneurysm formation in mice by regulating macrophages in an IL1RL2-p38 pathway-dependent manner. Physiological Reports 2023;11(2):e15581

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Strain:** C57BL6/J; **Pump:** 2004; **Duration:** 14 days; **ALZET Comments:** Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info(Male; 10-12 weeks old); peptides; cardiovascular;

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

Q11121: J. D. Kim, *et al.* Increased angiotensin II coupled with decreased Adra1a expression enhances cardiac hypertrophy in pregnancy-associated hypertensive mice. Journal of Biological Chemistry 2023;299(3):102964

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** WT; C57BL/6J; **Pump:** 1002; **Duration:** 6 days; **ALZET Comments:** Dose (2 mg/kg/day); Controls received mp w/ vehicle; animal info (Female; pregnant; 10-12 weeks old); Blood pressure measured via tail-cuff method; peptides; cardiovascular;

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: Ang 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;

Q11118: D. Jiang, et al. Analysis of Mechanisms for Increased Blood Pressure Variability in Rats Continuously Infused with Angiotensin II. Journal of the Renin Angiotensin Aldosterone System 2023;2023(4201342

Agents: Angiotensin II **Vehicle:** Acetic acid; **Route:** SC; **Species:** Rat; **Strain:** Wistar; **Pump:** 2002; **Duration:** 14 days; **ALZET Comments:** Dose (5.2 μg/kg/h); Controls received mp w/ vehicle; animal info (Male; 8 weeks old; Weighed 260-300 g); Blood pressure measured via tail-cuff method; peptides; cardiovascular; hypertension





Q11042: P. Jia, et al. Liensinine improves AnglI-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

Q11116: A. Javidan, *et al.* Celastrol Supplementation Ablates Sexual Dimorphism of Abdominal Aortic Aneurysm Formation in Mice. Biomolecules 2023;13(4):

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** Ldl receptor -/-backcrossed to C57BI/6N; **Pump:** 1004; 2004; **Duration:** 28 days;

ALZET Comments: Dose (500 or 1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male and female; 8-12 weeks old); Blood pressure measured via tail-cuff method; peptides; cardiovascular; abdominal aortic aneurysm

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 μ mol/g Angll, 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);

Q11285: J. Huang, *et al.* Macrophage scavenger receptor A1 antagonizes abdominal aortic aneurysm via upregulating IRG1. Biochemical Pharmacology 2023;213(115631

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** ApoE-/-SR-A1+/+; ApoE-/-SR-A1-/-; **Pump:** 2004; **Duration:** Not Stated;

ALZET Comments: Dose (1.44 mg/kg/d); animal info (Male; 15 weeks old); Blood pressure measured via tail cuff method; peptides; cardiovascular;

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."

Q11111: Y. Hu, *et al.* Stomatin-like protein 2 deficiency exacerbates adverse cardiac remodeling. Cell Death Discovery 2023;9(1):63

Agents: Ang II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** SLP-2-/-; WT (C57BL/6); **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose: (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male mice; 6-24 weeks old; Weighed 22-25 g); peptides; cardiovascular;

Q11284: J. Hu, et al. Identification of core cuprotosis-correlated biomarkers in abdominal aortic aneurysm immune microenvironment based on bioinformatics. Frontiers in Immunology 2023;14(1138126

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose (1000 ng/kg/day); Controls received mp w/ vehicle; animal info (12 weeks old); peptides; cardiovascular (abdominal aortic aneurysm)







Q11279: Y. Han, *et al.* Axl promotes intracranial aneurysm rupture by regulating macrophage polarization toward M1 via STAT1/HIF-1alpha. Frontiers in Immunology 2023;14(1158758

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1004; **Duration:** Not Stated; **ALZET Comments:** Dose (1000 ng/kg/min); animal info (Male; 6-8 weeks old); Blood pressure measured via tail cuff method;

Q11314: Y. Hada, et al. Neutrophil Elastase Inhibition by Sivelestat (ONO-5046) Attenuates AnglI-induced Abdominal Aortic Aneurysms in Apolipoprotein E-Deficient Mice. American Journal of Hypertension 2023;

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** apoE-/-; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose (1000 ng/min/kg); controls received mp w/ saline; animal info (male 8-10 weeks); blood pressure measured via tail cuff system; cardiovascular (abdominal aortic aneurysm)

Q11310: J. Guo, et al. Pharmacological Inhibition of Gasdermin D Suppresses Angiotensin II-Induced Experimental Abdominal Aortic Aneurysms. Biomolecules 2023;13(6):

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** ApoE-/- (C57BL/6 background); **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (1000 ng/kg/min); animal info (Male; 10-12 weeks old); Blood pressure measured via tail cuff method; peptides; cardiovascular (abdominal aortic aneurysm)

Q11294: D. Fu, *et al.* Angiotensin II-induced calcium overload affects mitochondrial functions in cardiac hypertrophy by targeting the USP2/MFN2 axis. Molecular and Cellular Endocrinology 2023;571(111938

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1004; **Duration:** 4 weeks; **ALZET Comments:** Dose (1 ug/kg/min); Controls received mp w/ vehicle; animal info (Male; 8-10 weeks old; Weighed about 25 g); peptides; cardiovascular;

Q11306: H. B. Figueiredo Galvao, *et al.* Proteasome inhibition reduces plasma cell and antibody secretion, but not angiotensin II-induced hypertension. Frontiers in Cardiovascular Medicine 2023;10(1184982

Agents: Angiotensin II **Vehicle:** Acetic acid in saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL6/J; **Pump:** 2004; **Duration:** 28 d **ALZET Comments:** Dose (0.7 mg/kg/day); 0.1% acetic acid in saline used; animal info (Male; 8-14 weeks old; Weighed about 30 g); Blood pressure measured via tail-cuff method; peptides; immunology;

Q11295: Z. Fang, et al. Gasdermin D affects aortic vascular smooth muscle cell pyroptosis and Ang II-induced vascular remodeling. Heliyon 2023;9(6):e16619

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 1004; **Duration:** 4 weeks; **ALZET Comments:** Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 6-8 weeks old); Blood pressure measured via tail cuff method; peptides; cardiovascular;

Q11292: Z. Fang, *et al.* MicroRNA-31 regulates TNF-alpha and IL-17A co-induced-endothelial cell apoptosis by repressing E2F6. Biochemical and Biophysical Research Communications 2023;666(76-82

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1002; **Duration:** 14 days; **ALZET Comments:** Dose (750 ng/kg/min); 0.9% NaCl used; Controls received mp w/ vehicle; animal info (Male; 8-10 weeks old); peptides; cardiovascular;

Q11305: R. Fan, *et al.* Severe hypertriglyceridemia caused by Gpihbp1 deficiency facilitates vascular remodeling through increasing endothelial activation and oxidative stress. Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids 2023;1868(7):159330

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** GKO (C57BL/6 background); **Pump:** 1007D; **Duration:** 2 weeks;

ALZET Comments: Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 3 and 10 months old); Blood pressure measured via tail cuff method; peptides; cardiovascular;



Q11271: T. W. Dorey, *et al.* PDE4D mediates impaired beta-adrenergic receptor signalling in the sinoatrial node in mice with hypertensive heart disease. Cardiovascular Research 2023;119(17):2697-2711

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** C57BL/6; **Pump:** Not Stated; **Duration:** 3 w **ALZET Comments:** Dose (2.5 mg/kg/day); controls received mp w/ vehicle; animal info (male 13 -16 weeks); cardiovascular;

Q11265: J. Deng, *et al.* Ghrelin improves endothelial function and reduces blood pressure in Ang II-induced hypertensive mice: Role of AMPK. Clinical and Experimental Hypertension 2023;45(1):2208774

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2002; **Duration:** 4 weeks; **ALZET Comments:** Dose (400 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 12 weeks old); Blood pressure measured via tail-cuff method; peptides; cardiovascular;

Q11098: X. Dai, *et al.* Thymus transplantation regulates blood pressure and alleviates hypertension-associated heart and kidney damage via transcription factors FoxN1 pathway. International Immunopharmacology 2023;116(109798 **Agents:** Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 2006; **Duration:** Not Stated; **ALZET Comments:** Dose (1000 ng/kg/d); Controls received mp w/ vehicle; animal info (Male; 8 weeks old; Avg weight 20 g); Blood pressure measured via tail-cuff method, see Fig. 1; peptides; cardiovascular (hypertension)

Q11097: Y. Chu, *et al.* Honokiol ameliorates angiotensin II-induced cardiac hypertrophy by 2 promoting dissociation of the Nur77-LKB1 complex and activating 3 the AMPK pathway1. SSRN Electronic Journal 2023;

Agents: Angiotensin II **Vehicle:** PBS; **Route:** SC; **Species:** Rat; **Strain:** Sprague-Dawley; **Pump:** 2006; **Duration:** 4 weeks; **ALZET Comments:** Dose (520 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 8 weeks old); post op. care (Honokiol); Blood pressure measured via tail-cuff method; peptides; cardiovascular (cardiac hypertrophy)

Q11095: Z. Chen, et al. Reduction of anaerobic glycolysis contributes to angiotensin II-induced podocyte injury with foot process effacement. Kidney International 2023;103(4):735-748

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** PKM2fl/fl/Cre+; PKM2fl/fl/Cre– **Pump:** 2004; **Duration:** 4 weeks;

ALZET Comments: Dose (700 ng/kg/min); Controls received mp w/ vehicle; animal info (8 weeks old; Male); peptides; Therapeutic indication (Podocyte injury);

Q11261: R. Chen, et al. CircTmeff1 Promotes Muscle Atrophy by Interacting with TDP-43 and Encoding A Novel TMEFF1-339aa Protein. Advanced Science 2023;10(17):e2206732

Agents: Angiotensin II **Vehicle:** PBS; **Route:** Not Stated; **Species:** Mice; **Strain:** C57BL/6J; **Pump:** 2001; **Duration:** 7 days; **ALZET Comments:** Dose (1.5 ug/kg/min); Controls received mp w/ vehicle; animal info (Male; 8 weeks old); peptides;

Q11263: L. Chen, et al. Mesenchymal stem cell-derived extracellular vesicles protect against abdominal aortic aneurysm formation by inhibiting NET-induced ferroptosis. Experimental & Molecular Medicine 2023;55(5):939-951

Agents: Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Mice; **Strain:** ApoE-/- C57BL/6J; **Pump:** 1004; **Duration:** 28 days; **ALZET Comments:** Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; 12 weeks old); peptides; cardiovascular (abdominal aortic aneurysm)

Q11252: A. Bruder-Nascimento, *et al.* Progranulin Maintains Blood Pressure and Vascular Tone Dependent on EphrinA2 and Sortilin1 Receptors and Endothelial Nitric Oxide Synthase Activation. Journal of the American Heart Association 2023;12(16):e030353

Agents: Angiotensin II; aldosterone; progranulin, recombinant **Vehicle:** Not Stated; **Route:** Not Stated; **Species:** Mice; **Strain:** C57BL6/J wild type; **Pump:** 1002; 1007D; **Duration:** 7 days; 14 days;

ALZET Comments: Dose: Ang II 490ng/min/kg; Aldo 600 μg/kg/day; recomb. progranulin 20μg/day; controls received mp w/ vehicle; animal info: 11-13 wk old male and female ; blood pressure measured via radiotelemetry (see fig.1 pg. 5); cardiovascular;





Q11247: M. Bode, *et al.* Complement component C3 as a new target to lower albuminuria in hypertensive kidney disease. British Journal of Pharmacology 2023;180(18):2412-2435

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 1002; **Duration:** 2 weeks; **ALZET Comments:** Dose (1.5 ng/g/min); animal info (Male); Blood pressure measured via tail cuff method; peptides; cardiovascular; nephrology (hypertensive kidney disease)

Q11244: X. Bai, *et al.* Sodium butyrate regulation of NLRP3-Ser295 phosphorylation inhibits hypertensive nephropathy. Journal of Functional Foods 2023;107(**Agents:** Angiotensin II **Vehicle:** Saline; **Route:** SC; **Species:** Rat; **Strain:** Sprague Dawley; **Pump:** 2004; **Duration:** 28 days;

ALZET Comments: Dose (75 ng/min); controls received mp w/ vehicle; animal info: male rats measuring 225 \pm 25 g; blood pressure measured via tail cuff; see pq.3 fig 1B; cardiovascular

Q11238: S. Ashida, *et al.* Administration of anti-inflammatory M2 macrophages suppresses progression of angiotensin II-induced aortic aneurysm in mice. Scientific Reports 2023;13(1):1380

Agents: Angiotensin II **Vehicle:** Not Stated; **Route:** SC; **Species:** Mice; **Strain:** apoE-/-; **Pump:** 2004; **Duration:** 4 weeks; **ALZET Comments:** Dose (1000 ng/kg/min); animal info (Male; 24-32 weeks old); peptides; cardiovascular, (aortic aneurysm)

Q11234: F. Ali, et al. Quercetin attenuates angiotensin II-induced proliferation of vascular smooth muscle cells and p53 pathway activation in vitro and in vivo. Biofactors 2023;49(4):956-970

Agents: Angiotensin II **Vehicle:** Saline; **Route:** Not Stated; **Species:** Mice; **Strain:** C57BL/6; **Pump:** 2004; **Duration:** 4 weeks; **ALZET Comments:** Dose (500 ng/kg/min); Controls received mp w/ saline; animal info (Male; 8 weeks old); Blood pressure measured via CODA noninvasive blood pressure system; peptides; cardiovascular (hypertension)

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; **Strain:** C57BL/6; **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;

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; **Strain:** C57BL/6J; **Pump:** 2004; **Duration:** 28 days; **ALZET Comments:** Dose (1000 ng/kg/min); Controls received mp w/ vehicle; animal info (Male; Apolipoprotein E deficient; 12-16 weeks old); peptides; cardiovascular;