

平成22年度業務実績に係る評価シート説明資料(別添資料)

独立行政法人国立循環器病研究センター

目次

資料1	...	P. 1
資料2	...	P. 2
資料3	...	P. 3
資料4	...	P. 4
資料5	...	P. 5
資料6	...	P. 6
資料7	...	P. 34
7-1		P. 37
}		
7-35		P. 357
資料8	...	P. 362
資料9	...	P. 363
資料10	...	P. 364
資料11	...	P. 365
資料12	...	P. 366
資料13	...	P. 368
資料14	...	P. 373
資料15	...	P. 377
資料16	...	P. 381
資料17	...	P. 383
資料18	...	P. 385
資料19	...	P. 386
資料20	...	P. 392
資料21	...	P. 393
資料22	...	P. 394
資料23	...	P. 395
資料24	...	P. 396

新しい右心ポンプ機能評価法の開発

研究体制

研究所: 研究企画調整室・循環動態制御部、病院: 移植部
(H22年度循環器病研究開発費)

研究の概要

重症心不全における「病態生理の解明」及びその「病態生理に基づいた治療」に関する研究の一つとして、統合的循環平衡理論に基づいた血行動態評価を行い、重症左心不全症例の進行に併発する右心不全を早期に診断する。その結果として、左心補助人工心臓(LVAD)の導入をスムーズに行うことを可能とする。

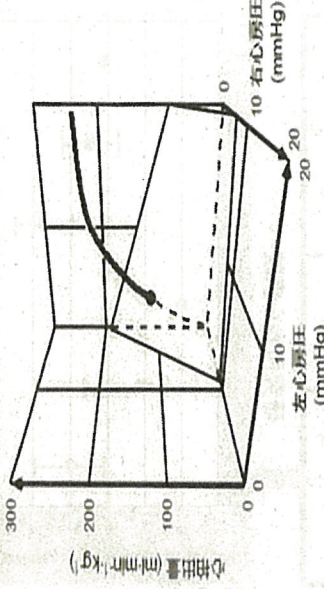
研究開発の背景

LVAD装着患者においては、右心不全は予後不良の極めて重要な合併症である。装着前から右心機能を直接的に評価し、LVAD植込み後に顕在化する右心不全を回避することができれば、世界初の治療戦略となり、劇的にLVAD治療、さらには重症心不全治療の予後を改善することが期待される。特に移植待機期間の長い本邦においては、極めて重要な課題の一つである。

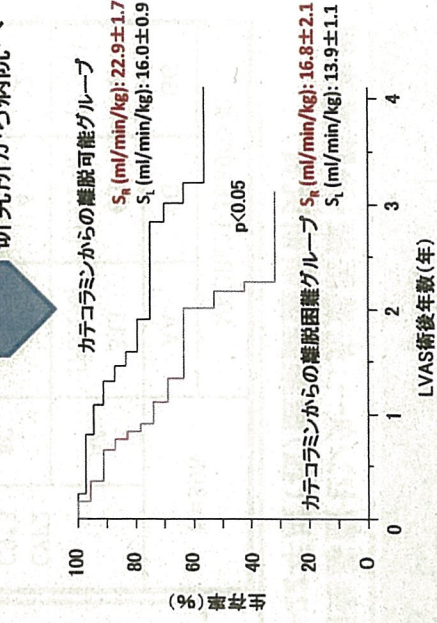
研究開発の成果

当センターにて2001年以降にLVAD植え込み術を行った症例で解析を行ったところ、LVAD植え込み術後に、長期にわたりカテコラミンから離脱できない群では、統合的循環モデルから計算される右心ポンプ機能の指標(SR)が、植え込み術前より有意に低かった。今後、前向き研究により、術前SRがLVAD導入の指標となるか検討を行う予定である。

研究所で開発された統合的循環平衡理論から、左心ポンプ機能、右心ポンプ機能を分離して評価することが可能となった。



研究所から病院へ



LVAD装着後のカテコラミンからの長期離脱困難症例では、予後が極めて不良で、装着前の右心カテコラミンデータでは、唯一右心ポンプ機能の指標(SR)のみが有意に低下していた。

抗血小板薬・抗凝固薬の臨床情報と遺伝子情報を用いた安全・安心な使用に関する研究

研究体制 病院：脳内科・心臓内科・輸血管理室、研究所：分子病態部、研究開発基盤センター：先進医療・治験推進部 (H22年度循環器病研究開発費、H20-22年度厚生労働科研究費、H18-22年度(独)医薬基盤研究費)

研究の概要

代表的抗血栓薬である抗血小板薬アスピリン(ProGEAR研究)、抗血小板薬クロピドグレル(Cognac研究、CYCLON研究)、抗凝固薬ワルファリン(Godward研究、Godward-Multi研究)に関する大規模(多施設共同)研究を病院、研究所、研究開発基盤センターが共同して推進し、各抗血栓薬の患者個人に最適な治療方法(投与量や薬剤の選択)を確立することで、より効果的で出血などの副作用が少ない安全・安心なテーラーメイド医療の確立を目指している。

研究の背景

抗血小板薬・抗凝固薬は、循環器疾患の治療に不可欠であるが、薬剤の標的酵素や薬剤の活性化・分解を行う酵素の遺伝子多型の影響を受け、抗血小板薬・抗凝固薬の効き目に人種差が見られる。したがって、日本人を対象にしたエビデンスの蓄積が待たれている。

研究の成果

アスピリン抵抗性を調べるProGEAR研究はアスピリン単独服薬症例583例を登録し、2年間の心血管イベントの追跡も終了した。血小板凝集能、トロンボキサン代謝産物量、併用薬などの臨床情報ならびにゲノム網羅的解析から得られた遺伝型と心血管イベント再発との関連を検討している。ワルファリンの必要投与量を検討するGodward研究では、VKORC1とCYP2C9の遺伝子変異が必要投与量を規定することを明らかにし、ビタミンK(VK)摂取量などの臨床情報と合わせたワルファリン投与量の予測式を提案している(右図)。今後、クロピドグレル抵抗性に関するCognac研究、CYCLON研究を含め、さらに最適で安全・安心な治療方法(テーラーメイド医療)の確立を目指し、研究を進める。

N=398	VKORC1(-1639G>A)		
	AA	AG	GG
AA (78.1%)	311 (78.1%)	60 (15.1%)	6 (1.5%)
AC (3.8%)	15 (3.8%)	4 (1.0%)	2 (0.5%)
CC	0	0	0

研究所から病院へ

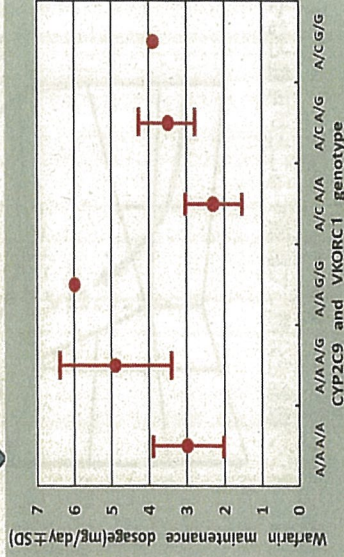


Figure 2. Warfarin dosage requirements stratified by CYP2C9 and VKORC1 genotype

研究開発基盤センターで解析

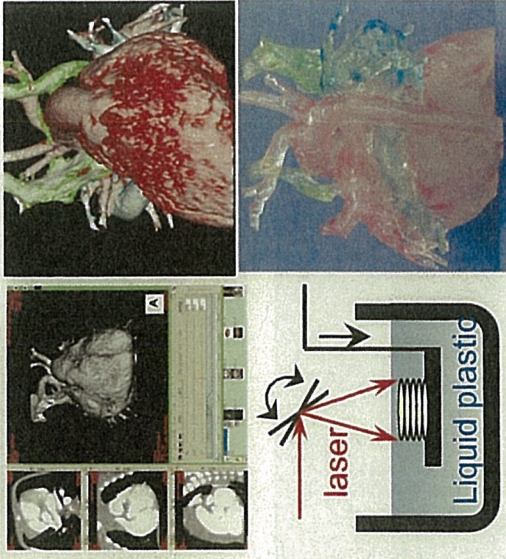
ワルファリン投与量(予測式) = $-1.54 + 0.01VK + 0.02$
 体表面積 + $0.71(AG+GG, AC+CC)$
 + $1.89(AG+GG, AA) - 1.03(AA, AA) - 0.02GOT +$
 $0.23eGFR$

※ VK: 10mg、体表面積: 100(m²)、遺伝子:
 (VKORC1, CYP2C9)、eGFR: 10(mL/分/1.73m²)

心臓手術やカテーテル治療のシミュレーターの開発

研究の概要

我々はこれまでにMSCT画像情報と光造形法(光硬化樹脂にピンポイントのレーザー光線を当てて精密模型を作成する技術)を用い、教育用および術前シミュレーション用の実物大の心臓模型を試作してきた。軟性エポキシ樹脂模型で手術シミュレーションがある程度可能であったが、材質を心筋や大血管により近づけて実物に近い切開縫合を可能にするために、光造形により心臓内外の鑄型を作成し、その中に適度なウレタン樹脂を真空下に注入する真空注型法を用いて心臓模型作成を試みた。診断および治療方針に3次元構造の理解が最も重要である複雑先天性心疾患の模型作製に応用した。



研究開発の背景

先天性心疾患などの心臓構造異常をともなう循環器疾患患者を一人でも多く救命するには、複雑に入り組んだ心臓大血管の構造を正確に診断することが必須である。断層心エコー、MSCT、MRIによる3次元画像診断技術が向上し、循環器疾患の診断や治療に大変有用な情報を与えてくれるようになった。しかし更なる治療成績の向上のためには、心臓外科医に3次元画像情報を提供するだけでは決して十分とは言えず、得られた3次元画像データを用いて実際に切開や縫合が可能な実物大の模型を提供することができれば、解剖学的異常をより正確に理解でき、安全に手術が可能となるばかりでなく、新しい治療手技の開発に役立つ。



研究開発の成果

患者のMSCT画像データから周囲組織を除去した後、光造形STLデータに変換し、次に外形マスター形状および注型用中子となる硬質プラスチック製の心臓模型を光造形法により作成し、最終的に真空条件下に心筋及び血管組織に近いウレタン樹脂を2者間に注入して複雑な中空形状を再現した。光造形法と真空注型による軟性樹脂による心臓レプリカは、心筋組織に近い硬度と柔軟性を持つ心臓模型を再現でき、実物に近い感触で切開縫合が可能であった。心臓シミュレーターとして、個々の患者さんの病態に応じたティラーメイドの安全な手術の実施、新しい手術手技の開発、医学教育、剖検心臓のアーカイブ化、などに応用できる可能性がある (CARDIOsimulator Project : CrossEffect Inc.との共同研究)。



急性期脳梗塞患者への自己骨髄単核球移植による細胞治療

研究体制: 再生医療部・脳神経内科・脳血管内科・臨床研究部・知的資産部
(循環器病研究開発費・経済産業省課題解決型医療機器開発費)

細胞治療のコンセプト

微小血管再生・保護による
神経再生・組織修復の促進
↓
骨髄単核球投与
↓
脳微小循環の再生・保護
↓
内因性神経再生・
組織修復の促進
↓
神経機能回復

臨床試験の概要

1. 対象患者
重症心原性脳塞栓症患者
2. 方法
発症7-10日に自己骨髄採取・
単核球精製・静脈内投与
3. エンドポイント
安全性、有効性
(historical controlとの対比)
4. 予定症例数
12症例(骨髄採取25ml群;6例、
50ml群;6例)

現況・発展性

1. 低用量群(6症例)終了
 2. 高用量群2症例エントリ一済
 3. 低用量群では治療に関連する重篤な有害事象なし
 4. 順調な機能回復をたどる症例が多い
- ↓
1. センターを中心とした多施設共同研究の実施
 2. 市民病院レベルでも使用可能な安全・簡単幹細胞分離デバイス開発



骨髄採取



セルプロセッシングセンターでの幹細胞分離



幹細胞の静脈内投与

迅速脳循環代謝測定法の開発

研究の概要

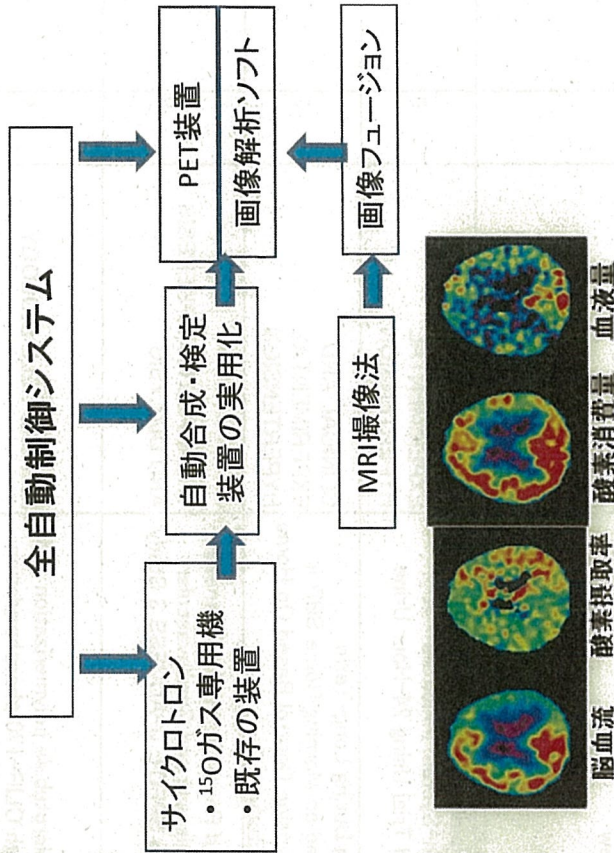
脳梗塞疾患の診断に有用な迅速なPET脳循環代謝検査システムを開発し、脳虚血性疾患における重症度と組織可逆性の診断評価を可能にする。これにより、急性期脳梗塞に本質的な血行再建治療や脳保護治療法の研究開発を加速する。

研究開発の背景

脳梗塞疾患において最適な治療法を選択するには、脳虚血の重症度と可逆性の診断が本質的であるが、これを安定に提供できる診断法はなかった。¹⁵O-標識ガスをPETを使う方法は有用な情報を提供するが検査時間が長く、また煩雑な手順を必要とするため実用的ではなかった。

研究開発の成果

検査時間の短縮化と省力化を可能にする¹⁵O-標識ガスPET動態解析理論開発とプログラムの実用化がなされ、臨床診断法としての妥当性が確認できた。高感度化されたPET装置の定量精度確保、自動化された迅速標識合成装置の開発がなされ、さらに専用の超小型サイクロトロンを含む統合システムの実用化されつつある。将来は急性期疾患への応用も可能にしたい



- 基礎理論、実用プログラムの開発
- 迅速撮像理論
- 無採血定量化学理論
- 関心領域設定・ログレポート
- MRI画像と融合解析
- 迅速対応型合成・検定装置の開発
- 分子イメージング評価

研究業績リスト(欧文)

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクト ファクター
1	Review	Thompson, BB; Bejot, Y; Caso, V; Castillo, J; Christensen, H; Flaherty, ML; Foerch, C; Ghandehari, K; Giroud, M; Greenberg, SM; Halle, H; Hemphill, JC; Heuschmann, P; Juvela, S; Kimura, K; Mvint, PK; Nagakane, Y; Naritomi, H; Passero, S; Rodriguez-Yanez, MR; Roquer, J; Rosand, J; Rost, NS; Saloheimo, P; Salomaa, V; Sivenius, J; Sorimachi, T; Togha, M; Toyoda, K; Turaj, W; Vermos, KN; Wolfe, CDA; Woo, D; Smith, EE	Prior antiplatelet therapy and outcome following intracerebral hemorrhage: A systematic review	NEUROLOGY	2	8.172
2	Article	Miwa, Y; Tsuchihashi, T; Ohta, Y; Tominaga, M; Kawano, Y; Sasaguri, T; Ueno, M; Matsuoka, H	Antiproteinuric Effect of Cilnidipine in Hypertensive Japanese Treated with Renin-Angiotensin-System Inhibitors - A Multicenter, Open, Randomized Trial Using 24-Hour Urine Collection	CLINICAL AND EXPERIMENTAL HYPERTENSION	0	1.292
3	Article	Kawano, Y; Horio, T; Kamide, K; Iwashima, Y; Yoshihara, F; Nakamura, S	Blood Pressure and Medication During Long-Term Antihypertensive Therapy Based on Morning Home SBP in Hypertensive Patients: Hypertension Control Based On Home Systolic Pressure (HOSP) Substudy	CLINICAL AND EXPERIMENTAL HYPERTENSION	0	1.292
4	Article	Nakamura, S; Kawano, Y; Hase, H; Hatta, T; Nishimura, S; Moroi, M; Nakagawa, S; Kasai, T; Kusuoka, H; Takeishi, Y; Nakajima, K; Momose, M; Takehana, K; Nanasato, M; Yoda, S; Nishina, H; Matsumoto, N; Nishimura, T	Prognostic Study of Cardiac and Renal Events in Japanese Patients With Chronic Kidney Disease and Cardiovascular Risk Using Myocardial Perfusion SPECT: J-ACCESS 3 Study Design	THERAPEUTIC APHERESIS AND DIALYSIS	0	1.14
5	Article	Nakano, A; Kato, H; Watanabe, T; Min, KD; Yamazaki, S; Asano, Y; Seguchi, O; Higo, S; Shintani, Y; Asanuma, H; Asakura, M; Minamino, T; Kaibuchi, K; Mochizuki, N; Kitakaze, M; Takashima, S	AMPK controls the speed of microtubule polymerization and directional cell migration through CLIP-170 phosphorylation	NATURE CELL BIOLOGY	4	19.527
6	Article	Shinohara, Y; Katayama, Y; Uchiyama, S; Yamaguchi, T; Handa, S; Matsuoka, K; Ohashi, Y; Tanahashi, N; Yamamoto, H; Genka, C; Kitagawa, Y; Kusuoka, H; Nishimaru, K; Tsuchida, M; Koretsune, Y; Sawada, T; Hamada, C	Gilostazol for prevention of secondary stroke (GSPS 2): an aspirin-controlled, double-blind, randomised non-inferiority trial	LANCET NEUROLOGY	8	18.126

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクト ファクター
7	Article	Hattori, F; Chen, H; Yamashita, H; Tohyama, S; Satoh, Y; Yuasa, S; Li, WZ; Yamakawa, H; Tanaka, T; Onitsuka, T; Shimoji, K; Ohno, Y; Egashira, T; Kaneda, R; Murata, M; Hidaka, K; Morisaki, T; Sasaki, E; Suzuki, T; Sano, M; Makino, S; Oikawa, S; Fukuda, K	Nongenetic method for purifying stem cell-derived cardiomyocytes	NATURE METHODS	17	16.874
8	Article	Kanazawa, H; Ieda, M; Kimura, K; Arai, T; Kawaguchi-Manabe, H; Matsuhashi, T; Endo, J; Sano, M; Kawakami, T; Kimura, T; Monkawa, T; Hayashi, M; Iwanami, A; Okano, H; Okada, Y; Ishibashi-Ueda, H; Ogawa, S; Fu, HY; Okada, K; Liao, YL; Tsukamoto, O; Isomura, T; Asai, M; Sawada, T; Okuda, K; Asano, Y; Sanada, S; Asanuma, H; Asakura, M; Takashima, S; Komuro, I; Kitakaze, M; Minamino, T	Heart failure causes cholinergic transdifferentiation of cardiac sympathetic nerves via gp130-signaling cytokines in rodents	JOURNAL OF CLINICAL INVESTIGATION	4	15.387
9	Article	Abe, M; Kimura, T; Morimoto, T; Taniguchi, T; Yamanaka, F; Nakao, K; Yagi, N; Kokubu, N; Kasahara, Y; Kataoka, Y; Otsuka, Y; Kawamura, A; Miyazaki, S; Nakao, K; Horiuchi, K; Ito, A; Hoshizaki, H; Kawaguchi, R; Setoguchi, M; Inada, T; Kishi, K; Sakamoto, H; Morioka, N; Imai, M; Shiomi, H; Nonogi, H; Adachi, S; Takiguchi, S; Okada, K; Yamamoto, K; Yamasaki, M; Miyata, H; Nakajima, K; Fujiwara, Y; Hosoda, H; Kangawa, K; Mori, M; Goldenberg, I; Horr, S; Moss, AJ; Lopes, CM; Barshesht, A; McNitt, S; Zareba, W; Andrews, ML; Robinson, JL; Locati, EH; Ackerman, MJ; Benhorin, J; Kaufman, ES; Napolitano, C; Platonov, PG; Priori, SG; Qi, M; Schwert, PJ; Shimizu, W; Towbin, JA; Vincent, GM; Wilde, AAM; Zhang, L	Ablation of C/EBP Homologous Protein Attenuates Endoplasmic Reticulum-Mediated Apoptosis and Cardiac Dysfunction Induced by Pressure Overload	CIRCULATION	4	14.816
10	Article	Makimoto, H; Nakagawa, E; Takaki, H; Yamada, Y; Okamura, H; Noda, T; Satomi, K; Suyama, K; Aihara, N; Kurita, T; Kamakura, S; Iida, A; Sakaguchi, K; Sato, K; Sakurai, H; Nishimura, D; Iwaki, A; Takeuchi, M; Kobayashi, M; Misaki, K; Yonemura, S; Kawahara, A; Sehara-Fujisawa, A	Sirolimus-Eluting Stent Versus Balloon Angioplasty for Sirolimus-Eluting Stent Restenosis: Insights From the j-Cypher Registry	CIRCULATION	3	14.816
11	Article		Effects of Ghrelin Administration After Total Gastrectomy: A Prospective, Randomized, Placebo-Controlled Phase II Study	GASTROENTEROLOGY	3	12.899
12	Article		Risk for Life-Threatening Cardiac Events in Patients With Genotype-Confirmed Long-QT Syndrome and Normal-Range Corrected QT Intervals	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	1	12.64
13	Article		Augmented ST-Segment Elevation During Recovery From Exercise Predicts Cardiac Events in Patients With Brugada Syndrome	JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY	1	12.64
14	Article		Metalloprotease-Dependent Onset of Blood Circulation in Zebrafish	CURRENT BIOLOGY	不明	10.992

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクトファクター
15	Article	Fujioka, M; Hayakawa, K; Mishima, K; Kunizawa, A; Irie, K; Higuchi, S; Nakano, T; Muroi, C; Fukushima, H; Sugimoto, M; Banno, F; Kokame, K; Miyata, T; Fujiwara, M; Okuchi, Kitamura, T; Iwami, T; Nichol, G; Nishiuchi, T; Hayashi, Y; Nishiyama, C; Sakai, T; Kajino, K; Hirai, A; Ikeuchi, H; Nonogi, H; Kawamura, Draws, O; Tsukamoto, O; Liem, D; Streicher, J; Wang, YB; Ping, PP	ADAMTS13 gene deletion aggravates ischemic brain damage: a possible neuroprotective role of ADAMTS13 by ameliorating postischemic hypoperfusion	BLOOD	5	10.555
16	Article	Kitamura, T; Iwami, T; Nichol, G; Nishiuchi, T; Hayashi, Y; Nishiyama, C; Sakai, T; Kajino, K; Hirai, A; Ikeuchi, H; Nonogi, H; Kawamura, Differential Regulation of Proteasome Function in Isoproterenol-Induced Cardiac Hypertrophy	Reduction in incidence and fatality of out-of-hospital cardiac arrest in females of the reproductive age	EUROPEAN HEART JOURNAL	2	9.8
17	Article	Draws, O; Tsukamoto, O; Liem, D; Streicher, J; Wang, YB; Ping, PP	The Cellular Prion Protein Identifies Bipotential Cardiomyogenic Progenitors	CIRCULATION RESEARCH	3	9.214
18	Article	Hidaka, K; Shirai, M; Lee, JK; Wakayama, T; Kodama, I; Schneider, MD; Morisaki, T	Structural Heterogeneity in the Ventricular Wall Plays a Significant Role in the Initiation of Stretch-Induced Arrhythmias in Perfused Rabbit Right Ventricular Tissues and Whole Heart Preparations	CIRCULATION RESEARCH	2	9.214
19	Article	Seo, K; Inagaki, M; Nishimura, S; Hidaka, I; Sugimachi, M; Hisada, T; Sugiura, S	What Is the Role of ER Stress in the Heart? Introduction and Series Overview	CIRCULATION RESEARCH	4	9.214
20	Review	Kitakaze, M; Tsukamoto, O	Structural basis for docking of peroxisomal membrane protein carrier Pex19p onto its receptor Pex3p	EMBO JOURNAL	1	8.993
21	Article	Sato, Y; Shibata, H; Nakatsu, T; Nakano, H; Kashiwayama, Y; Imanaka, T; Kato, H	Genetic Link Between Obesity and MMP14-Dependent Adipogenic Collagen Turnover	DIABETES	0	8.505
22	Article	Chun, TH; Inoue, M; Morisaki, H; Yamanaka, I; Miyamoto, Y; Okamura, T; Sato-Kusubata, K; Weiss, SJ	Bio and nanotechnological strategies for tumor-targeted gene therapy	BIOTECHNOLOGY ADVANCES	1	8.25
23	Review	Kang, JH; Toita, R; Katayama, Y	Pretreatment ASPECTS on DWI predicts 3-month outcome following rt-PA SAMURAI rt-PA Registry	NEUROLOGY	0	8.172
24	Article	Nezu, T; Koga, M; Kimura, K; Shiohara, Y; Nakagawara, J; Furui, E; Yamagami, H; Okada, Y; Hasegawa, Y; Kario, K; Okuda, S; Nishiyama, K; Naganuma, M; Minematsu, K; Nakano-Doi, A; Nakagomi, T; Fujikawa, M; Nakagomi, N; Kubo, S; Lu, S; Yoshikawa, H; Soma, T; Taguchi, A; Matsuyama, T	Bone Marrow Mononuclear Cells Promote Proliferation of Endogenous Neural Stem Cells Through Vascular Niches After Cerebral Infarction	STEM CELLS	7	7.747
25	Article	Nagahama, Y; Ueno, M; Miyamoto, S; Morii, E; Minami, T; Mochizuki, N; Saya, H; Takakura, N	Continuous separation of cells of high osteoblastic differentiation potential from mesenchymal stem cells on an antibody-immobilized column	CANCER RESEARCH	2	7.543
26	Article	Mahara, A; Yamaoka, T	The use of high-hydrostatic pressure treatment to decellularize blood vessels	BIOMATERIALS	1	9.365
27	Article	Funamoto, S; Nam, K; Kimura, T; Murakoshi, A; Hashimoto, Y; Niwaya, K; Kitamura, S; Fujisato, T; Kishida, A		BIOMATERIALS	2	7.365

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクトファクター
29	Article	Iwamoto, N; Lu, R; Tanaka, N; Abe-Dohmae, S; Yokoyama S	Calmodulin interacts with ATP binding cassette transporter A1 to protect from calpain-mediated degradation and upregulates high-density lipoprotein generation.	Arterioscler Thromb Vasc Biol.	2	7.235
30	Article	Hirano, T; Sasaki, M; Mori, E; Minematsu, K; Nakagawara, J; Yamaguchi, T	Residual Vessel Length on Magnetic Resonance Angiography Identifies Poor Responders to Alteplase in Acute Middle Cerebral Artery Occlusion Patients Exploratory Analysis of the Japan Alteplase Clinical Trial II	STROKE	0	7.041
31	Article	Hirota, N; Konaka, K; Ono, T; Tamine, K; Kondo, J; Hori, K; Yoshimuta, Y; Maeda, Y; Sakoda, S; Naritomi, H	Reduced Tongue Pressure Against the Hard Palate on the Paralyzed Side During Swallowing Predicts Dysphagia in Patients With Acute Stroke	STROKE	0	7.041
32	Article	Nakagawara, J; Minematsu, K; Okada, Y; Tanahashi, N; Nagahiro, S; Mori, E; Shinohara, Y; Yamaguchi, T	Thrombolysis With 0.6 mg/kg Intravenous Alteplase for Acute Ischemic Stroke in Routine Clinical Practice The Japan post-Marketing Alteplase Registration Study (J-MARS)	STROKE	3	7.041
33	Article	Toyoda, K; Yasaka, M; Uchiyama, S; Nagao, T; Gotoh, J; Nagata, K; Koretsune, Y; Sakamoto, T; Iwade, K; Yamamoto, M; Takahashi, JC; Minematsu, K	Blood Pressure Levels and Bleeding Events During Antithrombotic Therapy The Bleeding With Antithrombotic Therapy (BAT) Study	STROKE	0	7.041
34	Article	Turin, TC; Kokubo, Y; Murakami, Y; Higashiyama, A; Rumana, N; Watanabe, M;	Lifetime Risk of Stroke in Japan	STROKE	1	7.041
35	Article	Hashikata, H; Liu, WY; Inoue, K; Mineharu, Y; Yamada, S; Nanayakkara, S; Matsuura, N; Hitomi, T; Takagi, Y; Hashimoto, N; Miyamoto, S; Koizumi, A	Confirmation of an Association of Single-Nucleotide Polymorphism rs1333040 on 9p21 With Familial and Sporadic Intracranial Aneurysms in Japanese Patients	STROKE	1	7.041
36	Article	Mori, E; Minematsu, K; Nakagawara, J; Yamaguchi, T; Sasaki, M; Hirano, T	Effects of 0.6 mg/kg Intravenous Alteplase on Vascular and Clinical Outcomes in Middle Cerebral Artery Occlusion Japan Alteplase Clinical Trial II (J-ACT II)	STROKE	9	7.041
37	Article	Furukawa, Y; Kokubo, Y; Okamura, T; Watanabe, M; Higashiyama, A; Ono, Y; Kawanishi, K; Okayama, A; Date, C	The Relationship Between Waist Circumference and the Risk of Stroke and Myocardial Infarction in a Japanese Urban Cohort The Suita Study	STROKE	2	7.041
38	Article	Toh, N; Kanzaki, H; Nakatani, S; Ohara, T; Kim, J; Kusano, KF; Hashimura, K; Ohe, T; Ito, H; Kitakaze, M	Left Atrial Volume Combined With Atrial Pump Function Identifies Hypertensive Patients With a History of Paroxysmal Atrial Fibrillation	HYPERTENSION	2	6.614
39	Article	143. Tabara Y, Kohara K, Kita Y, Hirawa N, Katsuya T, Ohkubo T, Hitora Y, Tajima A, Morisaki T, Miyata T, Nakayama N, Nakura J, Kawamoto R, Takahashi N, Hata A, Soma M, Imai Y, Kokubo Y, Okamura T, Tomoike H, Iwai N, Ogihara T, Inoue I, Tokunaga K, Johnson T, Caulfield M, Munroe P, on behalf of the Global Blood Pressure Genetics Consortium, Uemura S, Ueshima H, Miki T.	Common variants in the ATP2B1 gene are associated with susceptibility to hypertension. The Japanese Millennium Genome Project.	Hypertension	0	6.614
40	Article	Tabara Y, Kohara K, Kita Y, Hirawa N, Katsuya T, Ohkubo T, Hitora Y, Tajima A, Morisaki T, Miyata T, Nakayama N, Nakura J, Kawamoto R, Takahashi N, Hata A, Soma M, Imai Y, Kokubo Y, Okamura T, Tomoike H, Iwai N, Ogihara T, Inoue I, Tokunaga K.	Common variants in the ATP2B1 gene are associated with susceptibility to hypertension. The Japanese Millennium Genome Project.	Hypertension	0	6.614

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクトファクター
41	Article	Itida, H; Nakagawara, J; Hayashida, K; Fukushima, K; Watabe, H; Koshino, K; Zeniya, T; Eberl, S	Multicenter Evaluation of a Standardized Protocol for Rest and Acetazolamide Cerebral Blood Flow Assessment Using a Quantitative SPECT Reconstruction Program and Split-Dose I-123-Iodoamphetamine	JOURNAL OF NUCLEAR MEDICINE	0	6.424
42	Review	Masuda, M; Mochizuki, N	Structural characteristics of BAR domain superfamily to sculpt the membrane	SEMINARS IN CELL & DEVELOPMENTAL BIOLOGY	1	6.342
43	Article	Choo, J; Ueshima, H; Curb, JD; Shin, C; Evans, RW; El-Saed, A; Kadowaki, T; Okamura, T; Nakata, K; Otake, T; Miura, K; Abbott, RD; Sutton-Tyrrell, K; Edmundowicz, D; Kuller, LH; Sekikawa, A	Serum n-6 fatty acids and lipoprotein subclasses in middle-aged men: the population-based cross-sectional ERA-JUMP Study	AMERICAN JOURNAL OF CLINICAL NUTRITION	2	6.307
44	Article	Adachi, T; Nakanishi, M; Otsuka, Y; Nishimura, K; Hirokawa, G; Goto, Y; Nonogi, Inoue, N; Okamura, T; Kokubo, Y; Fujita, Y; Sato, Y; Nakanishi, M; Yanagida, K; Kakino, A; Iwamoto, S; Watanabe, M; Ogura, S; Otsui, K; Matsuda, H; Uchida, K; Yoshimoto, R; Sawamura, T	Plasma MicroRNA 499 as a Biomarker of Acute Myocardial Infarction	CLINICAL CHEMISTRY	15	6.263
45	Article	Sato, Y; Nakanishi, M; Yanagida, K; Kakino, A; Iwamoto, S; Watanabe, M; Ogura, S; Otsui, K; Matsuda, H; Uchida, K; Yoshimoto, R; Sawamura, T	LOX Index, a Novel Predictive Biochemical Marker for Coronary Heart Disease and Stroke	CLINICAL CHEMISTRY	2	6.263
46	Article	Fujita, Y; Kakino, A; Harada-Shiba, M; Sato, Y; Otsui, K; Yoshimoto, R; Sawamura, T	C-Reactive Protein Uptake by Macrophage Cell Line via Class-A Scavenger Receptor	CLINICAL CHEMISTRY	1	6.263
47	Article	Liu, LP; Zaccchia, M; Tian, XF; Wan, LX; Sakamoto, A; Yanagisawa, M; Alpern, RJ; Preisig, PA	Acid regulation of NaDC-1 requires a functional endothelin B receptor	KIDNEY INTERNATIONAL	1	6.193
48	Article	Tanji, M, Ishizaki T, Ebrahimi S, Tsuboguchi Y, Sukezane T, Akagi T, Frame MC, Hashimoto N, Miyamoto S, Narumiya S	mDia1 Targets v-Src to the Cell Periphery and Facilitates Cell Transformation, Tumorigenesis, and Metastasis	MOLECULAR AND CELLULAR BIOLOGY		6.057
49	Article	Noda, K; Zhang, JH; Fukuhara, S; Kunimoto, S; Yoshimura, M; Mochizuki, N	Vascular Endothelial-Cadherin Stabilizes at Cell-Cell Junctions by Anchoring to Circumferential Actin Bundles through alpha- and beta-Catenins in Cyclic AMP-Epac-Rap1 Signal-activated Endothelial Cells	MOLECULAR BIOLOGY OF THE CELL	7	5.979
50	Article	Hausenloy, DJ; Baxter, G; Bell, R; Botker, HE; Davidson, SM; Downey, J; Heusch, G; Kitakaze, M; Lecour, S; Mentzer, R; Mocanu, MM; Ovize, M; Schulz, R; Shannon, R; Walker, M; Walkinshaw, G; Yellon, DM	Translating novel strategies for cardioprotection: the Hatter Workshop Recommendations	BASIC RESEARCH IN CARDIOLOGY	6	5.973
51	Article	Takahama, H; Asanuma, H; Sanada, S; Fujita, M; Sasaki, H; Wakeno, M; Kim, J; Asakura, M; Takashima, S; Minamino, T; Komamura, K; Sugimachi, M; Kitakaze, M	A histamine H-2 receptor blocker ameliorates development of heart failure in dogs independently of beta-adrenergic receptor blockade	BASIC RESEARCH IN CARDIOLOGY	0	5.973
52	Review	Tsukamoto, O; Minamino, T; Kitakaze, M	Functional alterations of cardiac proteasomes under physiological and pathological conditions	CARDIOVASCULAR RESEARCH	6	5.801

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクト ファクター
53	Article	Ikoma, Y; Watabe, H; Hayashi, T; Miyake, Y; Teramoto, N; Minato, K; Iida, H	Measurement of density and affinity for dopamine D-2 receptors by a single positron emission tomography scan with multiple injections of [¹¹ C]-raclopride	JOURNAL OF CEREBRAL BLOOD FLOW AND METABOLISM	0	5.457
54	Article	Shidahara, M; Ito, H; Otsuka, T; Ikoma, Y; Arakawa, R; Kodaka, F; Seki, C; Takano, H; Takahashi, H; Turheimer, FE; Kimura, Y; Kanno, I; Suhara, T	Measurement error analysis for the determination of dopamine D-2 receptor occupancy using the agonist radioligand [¹¹ C]-MPPA	JOURNAL OF CEREBRAL BLOOD FLOW AND METABOLISM	0	5.457
55	Article	Nishikimi, T; Minamino, N; Ikeda, M; Takeda, Y; Tadokoro, K; Shibasaki, I; Fukuda, H; Horiuchi, Y; Oikawa, S; Ieiri, T; Matsubara, M; Higo, S; Asano, Y; Kato, H; Yamazaki, S;	Diversity of molecular forms of plasma brain natriuretic peptide in heart failed-different proBNP-108 to BNP-32 ratios in atrial and ventricular overload	HEART	2	5.385
56	Article	Nakano, A; Tsukamoto, O; Seguchi, O; Asai, M; Asakura, M; Asanuma, H; Sanada, S; Minamino, T; Komuro, I; Kitakaze, M;	Isoform-specific Intermolecular Disulfide Bond Formation of Heterochromatin Protein 1 (HP1)	JOURNAL OF BIOLOGICAL CHEMISTRY	0	5.328
57	Article	Wakabayashi, S; Nakamura, TY; Kobayashi, S; Hisamitsu, T	Novel Phorbol Ester-binding Motif Mediates Hormonal Activation of Nat+/H+ Exchanger	JOURNAL OF BIOLOGICAL CHEMISTRY	2	5.328
58	Article	Sasaki, K; Takahashi, N; Satoh, M; Yamasaki, M; Minamino, N	A Peptidomics Strategy for Discovering Endogenous Bioactive Peptides	JOURNAL OF PROTEOME RESEARCH	2	5.132
59	Article	Horio, T; Iwashima, Y; Kamide, K; Tokudome, T; Yoshihara, F; Nakamura, S; Kawano, Y	Chronic kidney disease as an independent risk factor for new-onset atrial fibrillation in hypertensive patients	JOURNAL OF HYPERTENSION	1	4.988
60	Article	Nakano, A; Inoue, N; Sato, Y; Nishimichi, N; Takikawa, K; Fujita, Y; Kakino, A; Otsui, K; Yamaguchi, S; Matsuda, H; Sawamura, T	LOX-1 mediates vascular lipid retention under hypertensive state	JOURNAL OF HYPERTENSION	3	4.988
61	Article	Arima, H; Anderson, C; Omae, T; Liu, LS; Tzourio, C; Woodward, M; MacMahon, S; Neal, B; Rodgers, A; Chalmers, J	Perindopril-based blood pressure lowering reduces major vascular events in Asian and Western participants with cerebrovascular disease: the PROGRESS trial	JOURNAL OF HYPERTENSION	2	4.988
62	Article	Ishikane, S; Yamahara, K; Sada, M; Harada, K; Kodama, M; Ishibashi-Ueda, H; Hayakawa, K; Mishima, K; Iwasaki, K; Fujiwara, M; Kangawa, K; Ikeda, T	Allogeneic administration of fetal membrane-derived mesenchymal stem cells attenuates acute myocarditis in rats	JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY	2	4.965
63	Article	Nakaoka, Y; Shioyama, W; Kunimoto, S; Arita, Y; Higuchi, K; Yamamoto, K; Fujio, Y; Nishida, K; Kuroda, T; Hirota, H; Yamauchi-Takahara, K; Hirano, T; Komuro, I; Mochizuki, N	SHP2 mediates gp130-dependent cardiomyocyte hypertrophy via negative regulation of skeletal alpha-actin gene	JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY	2	4.965
64	Article	Sawada, T; Minamino, T; Fu, HY; Asai, M; Okuda, K; Isomura, T; Yamazaki, S; Asano, Y; Okada, K; Tsukamoto, O; Sanada, S; Asanuma, H; Asakura, M; Takashima, S;	X-box binding protein 1 regulates brain natriuretic peptide through a novel API/GRE-like element in cardiomyocytes	JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY	2	4.965
65	Article	Kakinuma, Y; Furihata, M; Akiyama, T; Arikawa, M; Handa, T; Katate, RG; Sato, T	Donepezil, an acetylcholinesterase inhibitor against Alzheimer's dementia, promotes angiogenesis in an ischemic	JOURNAL OF MOLECULAR AND CELLULAR	0	4.965

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクト ファクター
66	Review	Minamino, T; Kitakaze, M	ER stress in cardiovascular disease	JOURNAL OF MOLECULAR AND CELLULAR	6	4.965
67	Article	Iguchi, Y; Yamaguchi, M; Sato, H; Kihira, K; Nishimaki-Mogami, T; Une, M	Bile alcohols function as the ligands of membrane-type bile acid-activated G protein-coupled receptor	JOURNAL OF LIPID RESEARCH	2	4.917
68	Article	Tanaka, N; Abe-Dohmae, S; Iwamoto, N; Fitzgerald, ML; Yokoyama, S	Helical apolipoproteins of high-density lipoprotein enhance phagocytosis by stabilizing ATP-binding cassette transporter	JOURNAL OF LIPID RESEARCH	0	4.917
69	Article	Yoshimura, S; Toyoda, K; Kuwashiro, T; Koga, M; Otsubo, R; Konaka, K; Naganuma, M; Matsuoka, H; Naritomi, H; Minematsu, K	Ulcerated plaques in the aortic arch contribute to symptomatic multiple brain infarction	JOURNAL OF NEUROLOGY NEUROSURGERY AND PSYCHIATRY	0	4.869
70	Article	Nezu, T; Naganuma, M; Shono, Y; Toyoda, K; Minematsu, K	Central apnoea associated with subcortical haemorrhage in the left temporal lobe	JOURNAL OF NEUROLOGY NEUROSURGERY AND PSYCHIATRY	0	4.869
71	Article	Yamada, G; Ariyasu, H; Iwakura, H; Hosoda, H; Akamizu, T; Nakao, K; Kangawa, K	Generation of Transgenic Mice Overexpressing a Ghrelin Analog	ENDOCRINOLOGY	0	4.752
72	Article	Qiu, Y; Yanase, T; Hu, HD; Tanaka, T; Nishi, Y; Liu, M; Sueishi, K; Sawamura, T; Nawata, H	Dihydrotestosterone Suppresses Foam Cell Formation and Attenuates Atherosclerosis Development	ENDOCRINOLOGY	3	4.752
73	Article	Iwakura, H; Li, YS; Ariyasu, H; Hosoda, H; Kanamoto, N; Bando, M; Yamada, G; Hosoda, K; Nakao, K; Kangawa, K; Akamizu, T	Establishment of a Novel Ghrelin-Producing Cell Line	ENDOCRINOLOGY	2	4.752
74	Article	Ariyasu, H; Iwakura, H; Yamada, G; Kanamoto, N; Bando, M; Kohno, K; Sato, T; Kojima, M; Nakao, K; Kangawa, K; Akamizu, T	A Postweaning Reduction in Circulating Ghrelin Temporarily Alters Growth Hormone (GH) Responsiveness to GH-Releasing Hormone in Male Mice But Does Not Affect	ENDOCRINOLOGY	0	4.752
75	Article	Sugisawa, T; Kishimoto, I; Kokubo, Y; Makino, H; Miyamoto, Y; Yoshimasa, Y	Association of plasma B-type natriuretic peptide levels with obesity in a general urban Japanese population: the Suita	ENDOCRINE JOURNAL	0	4.752
76	Article	Yokokawa, M; Chugh, A; Ulfarsson, M; Takaki, H; Han, L; Yoshida, K; Sugimachi, M; Morady, F; Oral, H	Effect of linear ablation on spectral components of atrial fibrillation	HEART RHYTHM	1	4.559
77	Article	Nishizaki, M; Sugi, K; Izumida, N; Kamakura, S; Aihara, N; Aonuma, K; Atarashi, H; Takagi, M; Nakazawa, K; Yokoyama, Y; Kaneko, M; Suto, J; Saikawa, T; Okamoto, N; Ogawa, S;	Classification and assessment of computerized diagnostic criteria for Brugada-type electrocardiograms	HEART RHYTHM	0	4.559
78	Article	Itoh, H; Shimizu, W; Hayashi, K; Yamagata, K; Sakaguchi, T; Ohno, S; Makiyama, T; Aka, M; Ai, T; Noda, T; Miyazaki, A; Miyamoto, Y; Yamagishi, M; Kamakura, S; Horie, M	Long QT syndrome with compound mutations is associated with a more severe phenotype: A Japanese multicenter study	HEART RHYTHM	3	4.559
79	Article	Watanabe, H; Makiyama, T; Koyama, T; Kannankeril, P; Seto, S; Okamura, K; Oda, H; Itoh, H; Okada, M; Tanabe, N; Yagihara, N; Kamakura, S; Horie, M; Aizawa, Y; Shimizu, W	High prevalence of early repolarization in short QT syndrome	HEART RHYTHM	7	4.559

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクトファクター
80	Article	Kaplinger, JD; Tester, DJ; Alders, M; Benito, B; Berthet, M; Brugada, J; Brugada, P; Fressart, V; Guericoff, A; Harris-Kerr, C; Kamakura, S; Kyndt, F; Koopmann, TT; Miyamoto, Y; Pfeiffer, R; Pollevick, GD; Probst, V; Zumbagen, S; Vatta, M; Towbin, JA; Shimizu, W; Schulze-Bahr, E; Antzelevitch, C; Salisbury, BA; Guicheney, P; Wilde, AAM; Brugada, R; Schott, JJ; Wu, J; Shimizu, W; Ding, WG; Ohno, S; Toyoda, F; Itoh, H; Zang, WJ; Miyamoto, Y; Kamakura, S; Matsuura, H; Nademane, K; Brugada, J; Brugada, P; Brugada, R; Vatta, M; Towbin, JA; Antzelevitch, C; Horie, M	An international compendium of mutations in the SCN5A-encoded cardiac sodium channel in patients referred for Brugada syndrome genetic testing	HEART RHYTHM	14	4.559
81	Article	Murakami, A; Takasugi, H; Ohnuma, S; Koide, Y; Sakurai, A; Takeda, S; Hasegawa, T; Sasamori, J; Konno, T; Hayashi, K; Watanabe, Y; Mori, K; Sato, Y; Takahashi, A; Mochizuki, N; Takakura, N	KCN2 modulation of Kv4.3 current and its potential role in fatal rhythm disorders	HEART RHYTHM	1	4.559
82	Article	Temma, T; Iida, H; Hayashi, T; Teramoto, N; Ohta, Y; Kudomi, N; Watabe, H; Saji, H; Magata, Y	Sphingosine 1-Phosphate (S1P) Regulates Vascular Contraction via S1P(3) Receptor: Investigation Based on a New S1P(3) Receptor Antagonist	MOLECULAR PHARMACOLOGY	8	4.531
83	Article	Song, ZQ; Cai, L; Guo, L; Tsukamoto, Y; Yutani, C; Li, XA	Quantification of regional myocardial oxygen metabolism in normal pigs using positron emission tomography with injectable O-15-O-2	EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING	1	4.531
84	Article	Okamura, T; Kokubo, Y; Watanabe, M; Higashiyama, A; Ono, Y; Miyamoto, Y; Yoshimasa, Y; Okayama, A	Accumulation and expression of serum amyloid P component in human atherosclerotic lesions	ATHEROSCLEROSIS	0	4.522
85	Article	Kadota A, Miura K, Okamura T, Hozawa A, Murakami Y, Fujiyoshi A, Takashima N, Hayakawa T, Kita Y, Okayama A, Nakamura Y, Ueshima H; NIPPON DATA90 Research Group.	Triglycerides and non-high-density lipoprotein cholesterol and the incidence of cardiovascular disease in an urban Japanese cohort: The Suita study	ATHEROSCLEROSIS	3	4.522
86	Article	Toshinai, K; Yamaguchi, H; Kageyama, H; Matsuo, T; Koshinaka, K; Sasaki, K; Shioda, S; Minamino, N; Nakazato, M	Relationship of moderate metabolic risk factor clustering to cardiovascular disease mortality in non-lean Japanese: a 15-year follow-up of NIPPON DATA90.	ATHEROSCLEROSIS	0	4.522
87	Article	Fadini, GP; Maruyama, S; Ozaki, T; Taguchi, A; Meigs, J; Dimmeler, S; Zeiher, AM; de Kreutzenberg, S; Avogaro, A; Nickenig, G; Schmidt-Lucke, C; Werner, N	Neuroendocrine regulatory peptide-2 regulates feeding behavior via the orexin system in the hypothalamus	AMERICAN JOURNAL OF PHYSIOLOGY- ENDOCRINOLOGY AND METABOLISM	1	4.395
88	Article		Circulating Progenitor Cell Count for Cardiovascular Risk Stratification: A Pooled Analysis	PLOS ONE	3	4.351

番号	業績種別	著者名	タイトル	掲載誌名	被引用数	インパクト ファクター
89	Article	Hidaka, K; Nitta, T; Sugawa, R; Shirai, M; Schwartz, R; Amagai, T; Nitta, S; Takahama, Y; Morisaki, T	Differentiation of Pharyngeal Endoderm from Mouse Embryonic Stem Cell	STEM CELLS AND DEVELOPMENT	2	4.146
90	Article	Mishiro-Sato, E; Sasaki, K; Matsuo, T; Kageyama, H; Yamaguchi, H; Date, Y; Matsubara, M; Ishizu, T; Yoshizawa-Kumagaya, K; Satomi, Y; Takao, T; Shioda, S; Nakazato, M; Minamino, N	Distribution of neuroendocrine regulatory peptide-1 and-2, and proteolytic processing of their precursor VGF protein in the rat	JOURNAL OF NEUROCHEMISTRY	0	3.999
91	Article	Shibata, MA; Ambati, J; Shibata, E; Albuquerque, RJC; Morimoto, J; Ito, Y; Otsuki, Y	The endogenous soluble VEGF receptor-2 isoform suppresses lymph node metastasis in a mouse immunocompetent mammary cancer model	BMC MEDICINE	0	3.985
92	Article	Kakinoki, S; Yamaoka, T	Stable modification of poly(lactic acid) surface with neurite outgrowth-promoting peptides via hydrophobic collagen-like sequence	ACTA BIOMATERIALIA	0	3.975
93	Article	Tsuji, M; Aoo, N; Harada, K; Sakamoto, Y; Akitake, Y; Irie, K; Mishima, K; Ikeda, T; Fujiwara, M	Sex differences in the benefits of rehabilitative training during adolescence following neonatal hypoxia-ischemia in rats	EXPERIMENTAL NEUROLOGY	0	3.914
94	Article	Wakao, S; Hayashi, T; Kitada, M; Kohama, M; Matsuo, D; Teramoto, N; Ose, T; Itokazu, Y; Koshino, K; Watabe, H; Iida, H; Takamoto, T; Tabata, Y; Dezawa, M	Long-term observation of auto-cell transplantation in non-human primate reveals safety and efficiency of bone marrow stromal cell-derived Schwann cells in peripheral nerve regeneration	EXPERIMENTAL NEUROLOGY	7	3.914
95	Article	Maeda, H; Okada, M; Fujii, S; Nakamura, Y; Furuzono, T	Pickering-Type Water-in-Oil-in-Water Multiple Emulsions toward Multihollow Nanocomposite Microspheres	LANGMUIR	0	3.898
96	Article	Kishimoto, H; Akagi, M; Zushi, S; Teramura, T; Onodera, Y; Sawamura, T; Hamanishi, C	Induction of hypertrophic chondrocyte-like phenotypes by oxidized LDL in cultured bovine articular chondrocytes through increase in oxidative stress	OSTEOARTHRITIS AND CARTILAGE	0	3.888
97	Article	Kishimoto, H; Akagi, M; Zushi, S; Teramura, T; Onodera, Y; Sawamura, T; Hamanishi, C	Induction of hypertrophic chondrocyte-like phenotypes by oxidized LDL in cultured bovine articular chondrocytes through increase in oxidative stress	OSTEOARTHRITIS AND CARTILAGE	0	3.888
98	Article	Storr, CL; Cheng, H; Alonso, J; Angermeyer, M; Bruffaerts, R; de Girolamo, G; de Graaf, R; Gureje, O; Karam, EG; Kostyuchenko, S; Lee, S; Lepine, JP; Mora, MEM; Myer, L; Neumark, Y; Posada-Villa, J; Watanabe, M; Wells, JE; Kessler, RC; Anthony, JC	Smoking estimates from around the world: data from the first 17 participating countries in the World Mental Health Survey Consortium	TOBACCO CONTROL	1	3.852
99	Article	Matsutake, T; Sawamura, T; Srivastava, PK	High efficiency CD91- and LOX-1-mediated presentation of gp96-chaperoned peptides by MHC II	CANCER IMMUNOLOGY	不明	3.791
100	Article	Ogoh, S; Nakahara, H; Ainslie, PN; Miyamoto, T	The effect of oxygen on dynamic cerebral autoregulation: critical role of hypocapnia	JOURNAL OF APPLIED PHYSIOLOGY	1	3.732