



J-PCI registry

~Current status~



Specialist certification
and renewal

Comprehensive analysis using J-PCI
"Comprehensive analysis"
*Approved by central IRB



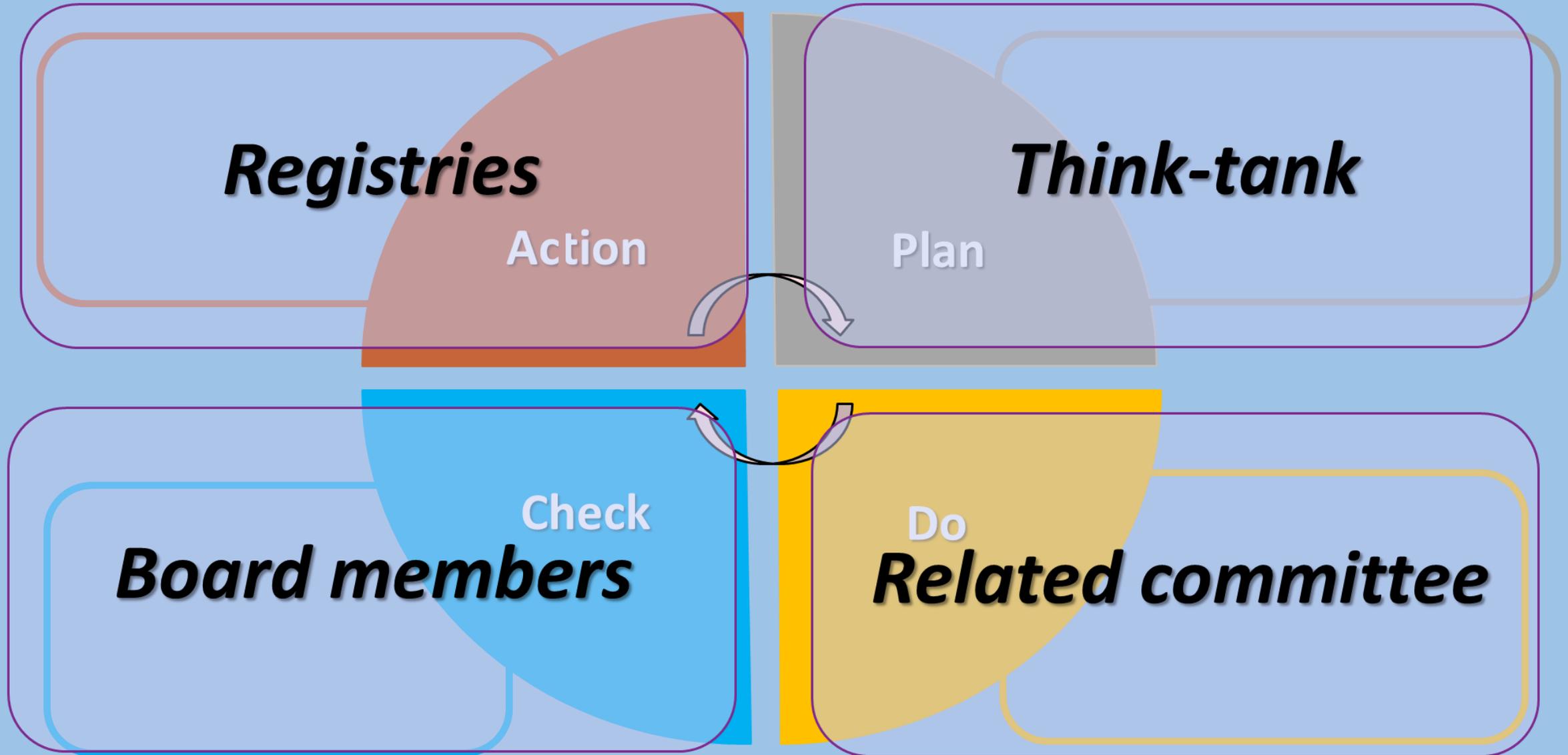
Research Proposal
(Academic output)

AMED- J-PCI
Prognosis analysis

Quality improvement of CVIT!

What's next?

Quality Improvement of CVIT



(Modified from Dr. John A Spertus version, JCS 2022)

◆ 【CVITレジストリー委員会の主な役割：QI推進の観点から】

1. 質の高いデータの収集・管理

- J-PCI、J-SHD、J-EVTなどのレジストリープロジェクトを通じて全国データを継続的に収集。
- データの**標準化・精度管理（データクレンジング）**を通じて信頼性を確保。
- センター毎の入力精度の評価・フィードバック。

2. アウトカムの可視化・ベンチマーキング

- 症例特性やリスク補正を加味した**センター別・オペレーター別のパフォーマンス指標**を作成。
- 自施設と全国平均との比較（ベンチマーキング）により、各施設の改善点を浮き彫りに。

3. QI指標の開発と活用

- 構造指標（例：緊急対応体制の有無）、プロセス指標（例：ガイドライン遵守）
アウトカム指標（例：30日死亡率、合併症率）をもとに**QIスコア**を開発。
- これらを基に、施設向けの**フィードバックレポート**を発行。

4. 政策提言・連携

- 厚労省や医療機関認定機構などに対して、エビデンスに基づく提言を行い、
構造的QIの推進（例：適正配置の議論や専門施設の認定基準構築）。
- 日本循環器学会など関連学会との連携による**包括的な循環器QI戦略**の中核。

Comparison of Outcomes of Women Versus Men with NonST-elevation Acute Coronary Syndromes Undergoing Percutaneous Coronary Intervention (from the Japanese Nationwide Registry)

Yohsei Numasawa, MD¹, Taku Inohara, MD², Hideki Ishii, MD³, Toshiaki Kimo, MD⁴, Masaki Kodaira, MD⁵, Shun Kohsaka, MD⁶, Kenshi Fujii, MD⁷, Shiro Uemura, MD⁸, Tetsuya Amano, MD⁹, Kazushige Kadota, MD¹⁰, and Masato Nakamura, MD¹¹

Previous studies have reported that women have worse outcomes than men after percutaneous coronary intervention.

In-Hospital Outcomes After Percutaneous Coronary Intervention for Acute Coronary Syndrome With Cardiogenic Shock (from a Japanese Nationwide Registry [J-PCI Registry])

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In-hospital complications and their predictors in acute coronary syndrome (ACS) patients with cardiogenic shock (CS) undergoing percutaneous coronary intervention (PCI) in the J-PCI Registry.

Impact of reduced-dose prasugrel vs. standard-dose clopidogrel on in-hospital outcomes of percutaneous coronary intervention in acute coronary syndrome patients

Keitaro Akita¹, Yoshi Numasa², Masato Nakamura³

Yohsei Numasawa, MD, Taku Inohara, MD, Hideki Ishii, MD, Kyohiei Yamaji, MD, Shun Kohsaka, MD, Mitsuki Sawa, Masaki Kodaira, MD, Shiro Uemura, MD, Kazushige Kadota, MD, Tetsuya Amano, MD, Masato Nakamura, MD, on behalf of J-PCI Investigators

Background—Sparse data exist about the outcomes after percutaneous coronary intervention (PCI) in old patients. This study sought to provide an overview of PCI in elderly patients, especially nonagenarians, in a Japanese large prospective nationwide registry.

Methods—2014 and 6780 (1.2%) elderly patients (aged ≥75 years) who underwent PCI in the J-PCI Registry were included in this study.

Results—Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively. The primary endpoint (in-hospital mortality) was 11.7%.

Conclusion—Older patients undergoing PCI had a higher prevalence of comorbidities and a higher in-hospital mortality.

Keywords: elderly patients, percutaneous coronary intervention, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

PLOS ONE

Diabetes mellitus and other cardiovascular risk factors in lower-extremity peripheral artery disease versus coronary artery disease: an analysis of 1,121,359 cases from the nat

Mitsuyoshi Takahara^{1,2}, Osa Toshio Shrine^{1,2}, Tetsuya Amano^{1,2}

Background: Lower-extremity peripheral artery disease (LEPAD) is a common cardiovascular disease. However, the prevalence of cardiovascular risk factors in LEPAD is unclear.

Methods: Data were extracted from the 2012 and 2017 Aorta and Cardiovascular Risk Factor Study (ACRF) registries. Data were extracted from the 2012 and 2017 Aorta and Cardiovascular Risk Factor Study (ACRF) registries.

Results: Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion: The prevalence of cardiovascular risk factors in LEPAD is similar to that in coronary artery disease.

Keywords: diabetes mellitus, cardiovascular risk factors, lower-extremity peripheral artery disease, coronary artery disease.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

openheart

Characteristics and in-hospital outcomes of patients undergoing balloon pulmonary angioplasty for chronic thromboembolic pulmonary hypertension: a time-trend analysis

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Background: Balloon pulmonary angioplasty (BPA) is a minimally invasive procedure for chronic thromboembolic pulmonary hypertension (CTEPH). However, the characteristics and in-hospital outcomes of patients undergoing BPA are unclear.

Methods: We analyzed 100 patients who underwent BPA in our institution from 2010 to 2019. The primary endpoint was in-hospital mortality.

Results: Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion: The prevalence of cardiovascular risk factors in CTEPH is similar to that in coronary artery disease.

Keywords: chronic thromboembolic pulmonary hypertension, balloon pulmonary angioplasty, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

ORIGINAL ARTICLE

Percutaneous coronary intervention in side branch coronary arteries: Insights from the Japanese nationwide registry

Mitsuki Sawano, MD, PhD, Shun Kohsaka, MD, PhD, Hideki Ishii, MD, PhD, Yohsei Numasawa, MD, PhD, Kyohiei Yamaji, MD, PhD, Taku Inohara, MD, PhD, Tetsuya Amano, MD, PhD, Yuki Ikaru, MD, PhD, Masato Nakamura, MD, PhD

Background: Percutaneous coronary intervention (PCI) in side branch coronary arteries (SBCAs) is challenging. However, the outcomes of PCI in SBCAs are unclear.

Methods: We analyzed 100 patients who underwent PCI in SBCAs in our institution from 2010 to 2019. The primary endpoint was in-hospital mortality.

Results: Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion: The prevalence of cardiovascular risk factors in SBCAs is similar to that in coronary artery disease.

Keywords: percutaneous coronary intervention, side branch coronary arteries, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

ORIGINAL ARTICLE

One-Year Outcome After Percutaneous Coronary Intervention for Acute Coronary Syndrome — An Analysis of 20,042 Patients From a Japanese Nationwide Registry —

Mitsuki Sawano, MD, PhD, Shun Kohsaka, MD, PhD, Hideki Ishii, MD, PhD, Yohsei Numasawa, MD, PhD, Kyohiei Yamaji, MD, PhD, Taku Inohara, MD, PhD, Tetsuya Amano, MD, PhD, Yuki Ikaru, MD, PhD, Masato Nakamura, MD, PhD

Background: Percutaneous coronary intervention (PCI) is a common procedure for acute coronary syndrome (ACS). However, the long-term outcomes of PCI are unclear.

Methods: We analyzed 20,042 patients who underwent PCI in our institution from 2010 to 2019. The primary endpoint was in-hospital mortality.

Results: Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion: The prevalence of cardiovascular risk factors in ACS is similar to that in coronary artery disease.

Keywords: percutaneous coronary intervention, acute coronary syndrome, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

Incidence and In-Hospital Outcomes of Patients Presenting With Stent Thrombosis from the Japanese Nationwide Percutaneous Coronary Intervention Registry)

Yohsei Ohno, MD¹, Kyohiei Yamaji, MD², Shun Kohsaka, MD³, Taku Inohara, MD⁴, Tetsuya Amano, MD⁵, Hideki Ishii, MD⁶, Kazushige Kadota, MD⁷, Masato Nakamura, MD⁸, Gaku Nakazawa, MD⁹, Fuminori Yoshimachi, MD¹⁰, and Yuki Ikaru, MD¹¹ on behalf of J-PCI Investigators

Background—Stent thrombosis (ST) is a serious complication of percutaneous coronary intervention (PCI). However, the incidence and in-hospital outcomes of ST are unclear.

Methods—We analyzed 157,978 patients who underwent PCI in the J-PCI Registry from 2010 to 2019. The primary endpoint was in-hospital mortality.

Results—Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion—The prevalence of cardiovascular risk factors in ST is similar to that in coronary artery disease.

Keywords: stent thrombosis, percutaneous coronary intervention, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

Association of the Hemoglobin to Serum Creatinine Ratio with In-Hospital Adverse Outcomes after Percutaneous Coronary Intervention among Non-Dialysis Patients: Insights from a Japanese Nationwide Registry (J-PCI Registry)

Yohsei Numasawa¹, Taku Inohara², Hideki Ishii³, Kyohiei Yamaji⁴, Shun Kohsaka⁵, Mitsuki Sawano⁶, Masaki Kodaira⁷, Shiro Uemura⁸, Kazushige Kadota⁹, Tetsuya Amano¹⁰, Masato Nakamura¹¹ and Yuki Ikaru¹²

Background—Although baseline hemoglobin and renal function are both important predictors of adverse outcomes after percutaneous coronary intervention (PCI), sparse data exist regarding the combined impact of these factors on outcomes. We sought to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods—We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

Impact of Institutional Volume on Critical In-Hospital Complications Adjusted for Patient- and Limb-Related Characteristics: An Analysis of a Nationwide Japanese Registry of Endovascular Interventions for PAD

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Background—The impact of institutional volume on critical in-hospital complications after endovascular therapy (EVT) for peripheral artery disease (PAD) is unclear.

Methods—We analyzed 100 patients who underwent EVT in our institution from 2010 to 2019. The primary endpoint was in-hospital mortality.

Results: Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion: The prevalence of cardiovascular risk factors in PAD is similar to that in coronary artery disease.

Keywords: endovascular therapy, peripheral artery disease, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

One-Year Outcome after percutaneous coronary intervention in nonagenarians: Insights from the J-PCI OUTCOME registry

Kenshi Otsu, MD, PhD¹, Shun Kohsaka, MD, PhD², Mitsuki Sawano, MD, PhD³, Shiro Uemura, MD, PhD⁴, Masaki Kodaira, MD, PhD⁵, Tetsuya Amano, MD, PhD⁶, Kazushige Kadota, MD, PhD⁷, Yohsei Numasawa, MD, PhD⁸, Kyohiei Yamaji, MD, PhD⁹, Taku Inohara, MD, PhD¹⁰, Tetsuya Amano, MD, PhD¹¹, Yuki Ikaru, MD, PhD¹², Masato Nakamura, MD, PhD¹³

Background—Percutaneous coronary intervention (PCI) in nonagenarians is challenging. However, the long-term outcomes of PCI in nonagenarians are unclear.

Methods: We analyzed 100 patients who underwent PCI in nonagenarians in our institution from 2010 to 2019. The primary endpoint was in-hospital mortality.

Results: Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion: The prevalence of cardiovascular risk factors in nonagenarians is similar to that in coronary artery disease.

Keywords: percutaneous coronary intervention, nonagenarians, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

Critical Presentation and In-Hospital Outcomes of Acute Myocardial Infarction in Young Patients

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Background—Acute myocardial infarction (AMI) in young patients is a concerning issue because of its adverse health and social impacts. Nevertheless, risk factors and prognoses of AMI in young patients are yet to be characterized.

Methods: We analyzed 100 patients who underwent PCI in our institution from 2010 to 2019. The primary endpoint was in-hospital mortality.

Results: Mean age was 75.5 years. The prevalence of diabetes mellitus, hypertension, and hyperlipidemia was 75.5%, 75.5%, and 75.5%, respectively.

Conclusion: The prevalence of cardiovascular risk factors in AMI is similar to that in coronary artery disease.

Keywords: acute myocardial infarction, young patients, outcomes, mortality.

Introduction: The aim of this study was to investigate the impact and threshold value of the hemoglobin to creatinine (Hgb/Cr) ratio on in-hospital adverse outcomes among non-dialysis patients in a Japanese nationwide registry.

Methods: We analyzed 157,978 non-dialysis patients who underwent PCI in 884 Japanese medical institutions in 2017. We studied differences in baseline characteristics and in-hospital clinical outcomes among four groups according to their quartiles of the Hgb/Cr ratio.

Results: The Hgb/Cr ratio was inversely associated with in-hospital mortality (odds ratio: 0.91, 95% confidence interval: 0.89–0.92; p < 0.001) and bleeding complications (odds ratio: 0.92, 95% confidence interval: 0.90–0.94; p < 0.001).

Conclusion: The Hgb/Cr ratio was inversely associated with in-hospital mortality and bleeding complications after PCI.

Keywords: hemoglobin to creatinine ratio, percutaneous coronary intervention, outcomes, mortality, bleeding complications.

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Thank you always for your kind corporation.

