؟ ، ثي ـ ـ ١ ٧

ح ˜Y ، ثي ϫ ئي ˚ ١ ٧ ، ط ز ثي ăً ϫ ئي ˚ ١ ٧ Ή ، ً ٧ ì ١ ز β ϫ peripheral arterial disease PAD ˙ ٦ Ă Ã 1 ⅔ ١ ً ϫ л ٧ acute coronary syndrome ACS ز ف ж drug eluting stent DES ă̈ ả ر É̃ [1-3] Î ، ثي dual antiplatelet therapy DAPT ψ’ ، ثي ؤ ز ١ ˘ ˜Y ˆ ρ Ή ă̈ ă̈ ˙ ϫ ـ Б ˚ S ы ˚ Ÿ ϫ ì Ü µ ϫ ز ⇔ / ض Ẓ ă̈ ١ ν ы ، ثي Ж Ь ˙ ـ ≤ ـ Î Ẓ ض ، ثي ـ Ɱ ᴘ ʔ ، ثي ϫ ـ ν ڂ ˛ ғ ρ ر ١ Î ؤ ˙ ả ˛ ˧ Y ٧ ˛ ˧ h Y ì ˙ ả ˛ ˙ ’ Y ز ả ˙ ả h ب ả ϫ ئي ˚ ١ ، ثي ˛ Ω سم л Ω ả ˛ ز ˙ ˛ Ä ض Î ˥ Ä ˫ ’ Σ ˚ ˛ ، ثي ـ ν ١ ă̈ ɜ ر Î

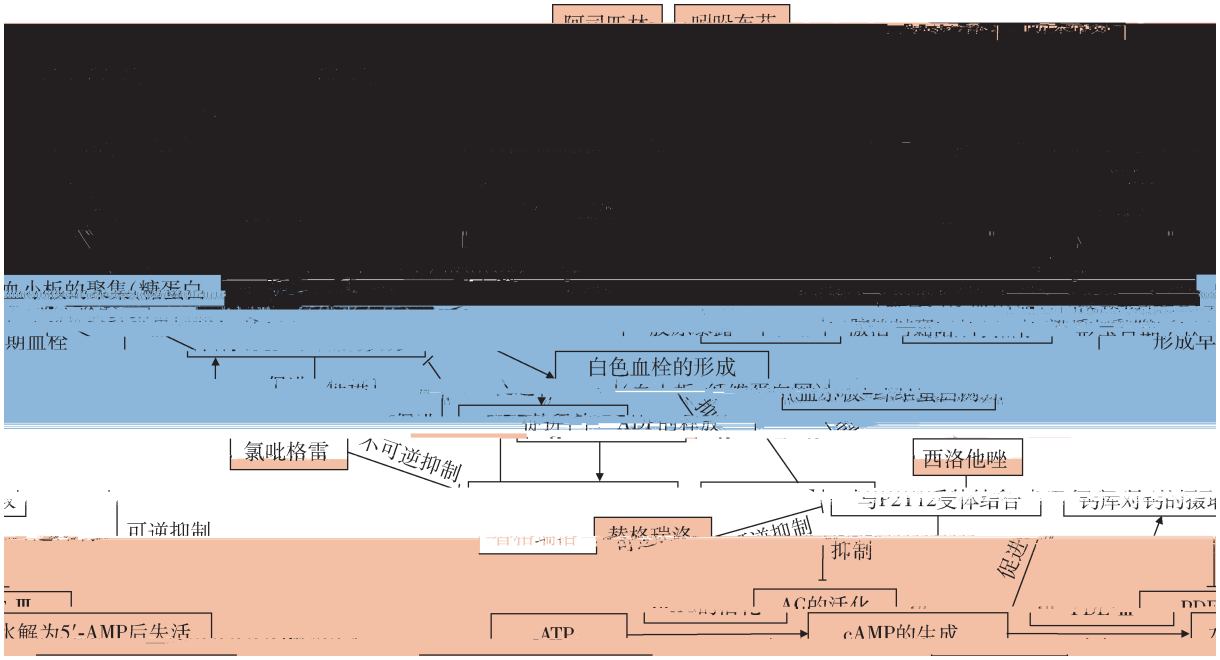
- ـ ـ - ـ ـ

، ثي ـ ض ر ، ثي ʁ S ƙ ـ ă̈ ʇ ę ٩ ق S ، ثي Б Î ˛ ì ʔ ، ثي ـ ơ 1. ˚ Ÿ ϫ z ˛ سج ، ثي ʁ ϫ ì ١ ٧ ز ˚ Ÿ " ʁ ˚ ϫ Î ʇ ٧ л [4-5] ì ρ ، NSAIDS S F ì ـ ì ؤ HP ك [6-8] ì ـ [9] س ϫ Î

z」 ϫ ʁ ê ˜ ⌊ ⌋ · [14,16] Î

ʁ ˥ Ą̈ □ Ä ϧ˜ ϰ З Ҕ л Ϙ ⌋ z」 ϫ ϻ F ˝ Ե ˜ ⌋ ч Ќ Î ѕ z」 ϫ ʁ F Ɣ ь ϰ [17] Î λ Ƶ ˥ ˩ ˜ Ÿ ы 2~4 Д [7] Î ⌊ z」 ϫ ⌋ B ч ą̈ ^ ʁ ы ˩ ˩

P2Y12 ρ □ Ä Ж ⌋ Ÿ ˜ λ ⁛ ϫ ą̈ Ƶ ضر ˝ Y ɟ Ϙ ƶ ˩ ɛ л Ƶ ⌊ ⁛ ˩ ą̈ Î Ω ، ڀي z」 ϫ л ϰ Ÿ ’ " Î ϖ P ϻ ˝ . Ɣ ˥ ˛ ν ^ л ⌊ z」 ϫ ˜ Ɣ θ [10] λ ı ڀي ы Ɣ ˥ ˛ [18] Î z」 ϫ ⌊ ϖ P ϻ л ϰ ˜ Ɣ 2. Ɣ Ⱨ ϧ ϸ z」 ϫ . ` ، ڀي ы 2~3 Д [11-12] Î ϻ ʁ ы ķ ǎ Ÿ Î ϧ ы ˁY Ɣ ƶ Ɣ ` z」 ϫ Ɣ Ɣ Δ ˩ ɛ Ⱨ PLATO [13] ϖ P ϻ ϻ ʔ ’ .. λ ϸ ы ˁY Ɣ Δ [19-20] Î ϸ ы ACS ą̈ ˜ Ɣ Î PLATO [21] ϸ ϻ ϖ P ϻ ы z」 ϫ ə ɟ Ⱶ ^ Ɣ ʁ ˥ Ɣ Î EUCLID [22] ν Î Ⱨ ϧ ѕ ə ɟ Ⱶ ˥ ˩ PAD ą̈ ϖ P ϻ S ϻ ϰ Ɣ ą̈ ˩ ϣ ì ˩ ϣϩي ƶ ˛ Ⱨ ʔ .. PRINCE [23] ɨ ψ ⌋ z」 ϫ ɪ λ ˥ ρ Ɣ ϻ ƶ ϖ P ϻ ⌋ z」 ϫ л ì Л ν z」 ϫ [14] õ ˥ ˛ S ˥ ψ transient PAD ą̈ ə ɟ Ⱶ Ե ϸ ischemic attack TIA ϰ Ɣ ʔ ν z」 ϫ [15] Î ^ ə ɟ Ⱶ ʁ ’ .. Î CASISP [24] ϸ ǎ ả ˛ ψ’ z」 ϫ ⌋ S ˁY ą̈ ˝ ˛ ط سم ⌋ z」 ϫ θ λ



-

-

ؒ ɣ ط س ν ⅄

ᾷ CSPS2 [25] س ă ᾶ ʿ ˻ z

˼ سج صمم ؒ ⅄ Δ Ӊ

ث ʼ ˛ ˆ ˻ ы ɣ RESTART

[26] ط ɣ D d ، ثي بحي

ы ɣ ⅄ ɣ ʁ

، ثي ψʼ Î

، ثي ψ ɣ ˻ л

ì ئي ƶ ˥ ئو ρ

Ƶ Î ضر ɣ ˻ ˋ ⅄ Ƶ

Ą [27] ì Ы ˻ [28] ƶ Ӈ Ы

Î

3. μ ɣ ă ، ثي ɣ

ʿ ˜ ɣ ɣ ɣ

μ ˛ ˆ ʾ Ą ⇔ تخه ì ₥ g

ƶ ɣ Î ∂ ض

ɣ Ƶ Ą ⇔ تخه ì

جم ˥ ì ₥ g μ ì ì

Ή ɣ ˜ ʊ Î

CRUE [11] ط ACS ᾶ مجه P

بم л z ˼ سج F ˜Y ɣ 2.7% ˋ ʿ

Ă 3.7% Î ˏ DES D Ω- ả ACS

ᾶ z ˼ سج л بم S مجه P بم ˜Y

ɣ Δ صمم Ӊ ث ʼ ˛ [29] Î

KAMIR-NIH [30] ط 75 ˪ ʼ

ᾶ بم D ξ

Ұ Δ ЫӀ 75 ┗Ή ' ă̈ Ұ Δ D ﻝ˜ [53] Î ả ، Ẓ ﻝ ﻁﺳﻡ ν Ж z ِ ﺝﺱ 75 mg/d D 65 ┗Ή ' ˜ ﻝ ﺽﺭﺹ ؛ 10.1 Д [54] F F ν Ж z ِ ﺝﺱ ' ˜ Ұ ЫӀ [55] Î ⁛ ﻝ ă̈ GRACE [56] ﻁﺳﻡ 75 ┗ ACS ă̈ 1 " Ұ Δ 5.3% ì Ẓ ﺵﻫ 9.3% 85 ┗ h Ɱ Ă 6.6% ƶ 18.4% Î PEGASUS TIMI 54 [57] h ﺥ ﻁ ﺑﻡ л z ِ ﺝﺱ ﺕ ﻝ ﺝ ﻝ ⊐ ﺵﻫﻱﻱ ﻝ ă̈ 75 ┗ ă̈ ˜Y Ұ ﺽ <75 ┗ ă̈ 2 Д Î ، 6 ﻮﺋ h ﺥ ﻁ ﺽ ﻝ ˌ ă̈ " Ұ Δ ' ﻁ Ẓ [58] Î ả ξ ﻟﻡ 75 ┗ ﻥ ﻝ ﻝ ˌ ă̈ Ұ ﻁ ЫӀ [59] Î ، h ﺥ ﻁ DAPT 65 ┗ ﻝ ˌ S TIA ă̈ ˌ F z ِ ﺝﺱ " Ұ ƶ Ұ h Ɱ ЫӀ 2.18 ƶ 2.13 Д [60] Î ﺽ ă ASPREE [61] ˌ z ِ ﺝﺱ ┗ Ж ﻣﻡ в 5 ﺟ ^ ﻁ ЫӀ ˌ Ұ ˌ Ұ ЫӀ 60% Î 2. ˌ ┗ ЫӀ ^ ă̈ Ұ ﻝ ˌ ˜Y˜Y ЫӀ Î ﻥ ﻝ ˌ S TIA ă̈ ﺹ ؛ ß D ★ F ، ﺛﻱ Î HOT [62] ﺭ Ұ " Ұ Δ ЫӀ ˌ ┗ Ä ┗ z ِ ﺝﺱ Î 3. ЫӀ ┗ ЫӀ ┗ Y ﻉ ă̈ ﺛﻱ ч ƶ Ή ЫӀ B ﺥ ч ν Y ﻉ ، ﺛﻱ · Î ACS ă̈ ЫӀ ≈ ă̈ ƶ Ұ Ё ﻁ ЫӀ ^ ﻯ ، ﺛﻱ ν ﻝ [63] Î ﺽ COMPASS [64] D h ﺥ ˜Y Ұ ┗ glomerular GFR ﺝﺟ ˇ z ِ ﺝﺱ ┗ ч O ﺝﺟ ، ﺵﺟ PAD ă̈ Ұ Î Ȝ ķ ؛ F z ِ ﺝﺱ ﻝ ЫӀ ЫӀ 2.5 Д ^ Ж ЫӀ [65] z ِ ﺝﺱ Ж ă̈ ЫӀ ﻝ˜ ﻁ ^ ’ [66] Î ﺽ ЫӀ ┗ ă̈ ﺑﻡ ┗ Δ ﻁ ﺟﻫ P ﺑﻡ [67] Î Ȝ e ژ ئ ə ј Ⱶ ﻯ ЫӀ Ÿ S ЫӀ ﻝ˜ Îﺽ ﺛﻱ ҡ ì ƶ ٦ Y ЫӀ ، ﺛﻱ Ұ ﺵﻱﺽ ┗ ψ Î

B ┗ ﺭ ؛ ν ﻝ ، ﺛﻱ ، B ă̈ ﺛﻱ ψ ﺛﻱ ، B ┗ ă̈ ă D ﺛﻱ ﻝ ﺛﻱ ЫӀ ﺑﻫ ﺛﻱ ﻝ □ Ä ┗ ν ، ﺛﻱ ЫӀ ﺥ ﻁ ﻮﺋ Ä ’ ﻮﺋ ˆ ˀ Ω ì ƶ ِ Ẓ [68] Î ν ، ﺛﻱ ﺽ ٦ Ч ﻝ ˌ ЫӀ Ж ┗ ، ﺥ . = ﺥ ِ Y ЫӀ Ұ [69] Î Ẓ ﺽ ν ، ﺛﻱ ﻝ ˌ ' ِ ﻝ Ɱ ┗ Î ’ ﺱﺱ ، ﺛﻱ ν ﻝ ķ ⁛ Ȝ percutaneous coronary intervention PCI D ă̈ ă ﺛﻱ ЫӀ ﺑﻫ ﺭ ˌ P2Y12 ρ □ Ä Ж ﻉ ﻝ [70-71] ﺛﻱ ЫӀ ﺑﻫ ﺭ ˌ ، ﺛﻱ F ﻉ Y ﻝ˜Y ِ З Î ، ﻥ Ì ؛ ، ﺛﻱ ν ﻝ 1. z ِ ﺝﺱ ح ﻁ z ِ ﺝﺱ. ν ﻝ ă̈ ~ PCI ß ḫ ﻝ ﺵﻫﻱﻱ 2.9 Д [72] Î λ ﺥ ˆ ˀ ADAPT-DES [73] ƶ ASCET [74] ă س ă PCI D DAPT ă̈ ˌ z ِ ﺝﺱ ν ﻝ ┗ ﻝ Δ ژ Î ﻝ ˌ ă̈ z ِ ﺝﺱ. ν ﻝ ЫӀ ˌ " Ή ﺵﻫﻱﻱ [75-76] ^ ┗ ﺵﻫﻱﻱ ƶ ˌ ' ﻁ [21] Î ، س ă PAD ă̈ ˌ z ِ ﺝﺱ ν ﻝ ƶ ﺟﻫ P ﺑﻡ ν ﻝ h Ɱ 60% ƶ 65% ⁛ ﻝ ă̈ ı ^ PAD ă̈ z ِ ﺝﺱ ν ﻝ ض ﻕ ﻑ ƶ ﻝ Ȝ ă̈ ˌ ˌ Ẓ

ض PAD ắ ∂ Ƶ [77] Î

2. ﻫ P ﺑﻢ CYP2C19 Ƶ ŏ ⁛ ١ ƶ

١ ˈ ắ D ط ١ Î Ẓ

١ Ế ă ﻫ P ﺑﻢ ⁛ ١ ắ

ˈ ف = CYP2C19 ЫI ỗ µ Ƶ ـ ف =

ﻣﻢ ١ ـ Δ ط ˈ [78-81] Î

TRITON-TIMI 38 [79] Ƶ ١ h خ ط

CYP2C19 ЫI ỗ µ Ƶ ف = ١ л

Δ ر ١ شھ ì شھ ١ ١ شھيي ì

شھ ١ˈ ˈ ы 53% Î PLATO

[82] ط ﻫ P ﺑﻢ ACS ắ ˈ

CYP2C19 ЫI ỗ µ Ƶ ف = ـ ف =

ﻣﻢ 30 d ˛ ١ Δ سط

λ ض ă 12^ Ң ʒ ’

.. Î Ω ả ، سم س ف = CYP2C19 Ƶ

2^ ١ µ ^ PCI D л ثي ١ ắ

ˎ Δ ط ف = S ف

= 1^ ١ µ ^ ثي ١ ắ [80] Î

سم س ھ CYP2C19 Ƶ ١ ١ я Ή

⁛ ١ D [79,83] Î

ă ﻫ P ﺑﻢ ١ˈ ˈ /TIA ắ ˈ

ف = ЫI ỗ µ Ƶ CYP2C19 ắ ﻣﻢ ف =

ắ ˈ ƶ л Δ [84] Î ض

١ ١ˈ ˈ ắ CYP2C19*2 µ

Ƶ ʒ ١ˈ ˈ [85] Î ă ﻫ P

ﺑﻢ ١ˈ ˈ ắ ˈ ﻫ P ﺑﻢ ١

١ ắ ١ Δ ط ˈ ﺑﻢ P ﻫس

١ ض ١ Δ Ƶ [86] Î ١

ă PAD ắ ˈ CYP2C19 ЫI ỗ µ Ƶ ف

= Δ ы 30%[77] Î ض

CYP2C19 ١ ١ ắ ـ ϫ

1 ط ١ [87] Î سم

س ⁛ ١ ì ١ˈ ˈ ƶ PAD

ắ S D ـ ắ я Ƶ ھ

ƶ ثي ЫI ھ ، ثي F

ɜ л [1,3,88-90] Î

3. ﺑﻢ ﺑﻢ я ط

Ä ﻫ P ﺑﻢ ١ ắ ثي ١ ؤ

١ D [91-92] Î PLATO ˈ 10 285 ﻣﻢ

ACS ắ h خ ʒ ς CYP2C19

Ƶ ŏ ắ ﺑﻢ ă ١ ل

ئ Ế Σ ﻫ P ﺑﻢ [82] Î

PRINCE [23] ŏ ˈ S ˈ

TIA ắ ﺑﻢ л z ˛ سج ă

90 d خ ١ ت υ ثي ١ ắ ﻣﻢ ﻣﻢ Î

ﺑﻢ 3^ خ ˈ ﻣﻢ ﻣﻢ ١ λ Ң ʒ

’ .. ϫ ١ Δ ˈ Ң

Ế ʒ ’ .. [92] Î

ì ʾ ، ثي ١ ئو Ä

1. z ˛ سج ١ ɛ z ˛ سج ، ثي ψ

Ƶ ١ ˆ ɛ Ω Ƶ Ạ COX-1 Ƶ ì

ثي b/ a ρ Ƶ P2Y12 ρ Ƶ

١ ١ ì F ـ Ạ Ж ـ ì ƨ

١ Ң خ ì ψ Ạ

NSAIDS ١ л COX-1 ì л Ạ ì

١ ЫI ـ ì ئ ثي

ы Ạ ḫ ì ک ϫ [93] Î z ˛ سج ١

١ ы z ˛ سجЖ ـ ؤ ˎ

Δ ы ϫ [69] Î

2. ﻫ P ﺑﻢ ﻫ P ﺑﻢ ă ˈ ^ شج

. ˛ . ’ CYP2C19

ثي’ CYP3A4 Î CYP2C19 Ƶ ١

١ ƶ CYP2C19 ρ Ä Ж я ١ ɛ ﻫ P ﺑﻢ ،

ثي ψ Î ƨ CYP2C19 ـ B Ƶ ŏ

я h’ ٦ · ŏ ì ٦ · ŏ ì ˈ · ŏ ƶ

· ŏ [94] Î CHANCE Ƶ ط

Ω ả 58% ف CYP2C19 ЫI ỗ

µ Ƶ *2 *3 [95] Î ă ˈ · ŏ

50.0

F ، ثي ă̈ ⊔

⅔ ˚ ì

ì ρ ì ٮ ٨ ض T ų ì ˛ ˚ ì ЫI

ِ ì ų ì S ˜

⊔ Ạ ⊔ ض T

Ä Ђ ì ض T ∤ ă g

ِ ǎ̊ ì ض T ⇔ S ⊔ Ή

ٮ ٨ ض T ˇY ų ⊔ Mą ض ٮ ٨ 1 Ẓ

ˇY ų ξ ⊔ Î

2. ˛ لم ئ 1 لم هھ Î ì ٨ ì

› ì ЫI ì ЫI ì Ή ЫI ì ˇY є › +

هھ لم ψ’ ، ثي F 3 لم هھ

Î 2 ⇔ هھ Î ⇔ ججه هھ ِ ʁ Ή

س ⇔ · Ђ ، ثي ˜

` ر .. ψ’ ، ثي F ă̈

› هھ لم Î 3 HP كح هھ ƶ هھ لم Î

∤ ă z ¸ سج F ă̈ ʁ

14C/13C ججه هھ ض T ∤ ă HP كح Ђ Î

∤ ă ˜ ă̈ ٮ ٨ ʁ

S هھ لم Ή س ض T ض ˜ ų

Î

ì ، ثي ν ٨ لم

1. ثي ЫI هھ ʁ ثي ЫI هھ

ă̈ ˚ ˆ ˚ ئو ă̈ Ạ Ł

ˆ ì هھ ì ىلى ˜

خس هھ فح ǔ PCI ˚ ų ”Ω ∏ ì ٮ

ă̈ نم К ، ثي ِ يخ Δ

ă̈ Î ضر ǔ ، ثي ă̈ ʁ

هھ ثي ЫI Ή ر P2Y12 ρ □ Ä Ж Î

2. Ẓ هھ S D

Ң ϫ ئي ˜ ٨ ٨ ă̈ ʁ ججه P

بم Ẓ ٨ ٨ هھ Ή ψ’ P2Y12 ρ □ Ä Ж

˜ Î

1. SAPT

/ /

ِ ˚ ˚ ƶ

˚ سج ì S

□ Ä

PPI 1~3 H2

˚ ʁ ٮ ٨ DAPT

Ⱶ / ¨ [97]

2. TIA ă̈ ă

24 h d ϫ DAPT ʁ ˜ z ¸ سج +

ججه P بم Ạ S z ¸ سج ِ

ʁ ə j Ⱶ / ¨ + ججه P بم ٩

21 d 6

glucose-6-phosphate dehydrogenase

ϫ ئي ˜ ˛ ˚ ă̈ ↕ F z ¸ سج Î

3.DAPT m ų ă̈ ă̆ ↕

٨ س ų جح ˛

ئو ų ƶ ғ ض T б ، ثي

ς خ ٨ ، ثي Î ų ٮ б

DAPT

ِ ì ، ثي

` ˜ ų ، ثي

Ạ سم Ẓ z ¸ سج ì ٨ ٨

ظ ʒ ، ثني ۱ ɣ
ă б Ạ ۱ ۸ ، يخ خ я
ۏ ۔ ώ D Σ ، ثِي
ɣ ν ، ثني Ạ ə ɟ Ⱶ
S ˝ Î ۱ ˌ ˋ δ ɣ ˜ ă я
۱ ɣ ˜ D 10 d ۔ β D
ὦ ، يخ Î 75 L Ⱨ ˋ ɣ ă
۷ β ɣ Ɓ D d ، يخ Î
ˊ Ü ɣ ، ثني
ˏ
1. ۷ ɣ ر Z ς ژ S ۔ شج
β ɣ Ạ ں Ÿ ì ‴ ì ۱ ɣ
ƶ ɣ Î ۹ ، ثني
я ν ؏ P2Y12 ρ □ Ä Ж ì
ə ɟ Ⱶ S ˝ [98] Î
2. ɣ ر Z ς ˏ λ ژ ξ
ɣ Î ۹ ، ثني
DAPT S ν ؏ P2Y12 ρ □ Ä Ж ì ə
ɟ Ⱶ S ˝ [98] ⅔ شي ɣ خ
Mˌ ˽ ɣ Ạ ì ƶ
я Î
3ˈ ɣ ر Z ς ˇ ὦ >30 g/L ƶ
S ξ ɣ λ ɣ ч ’
˽ Y ۱ ≈ Î ↕ F SAPT Σ
P2Y12 ρ □ Ä Ж ’ D я ﻳز Ɓ ↕ ۱
۸ DAPT DAPT S ν ؏
P2Y12 ρ □ Ä Ж ì ə ɟ Ⱶ S ˝ [98] ⅔
شي ɣ خ Mˌ ˽ ɣ Ạ
ì ƶ я Î
4. " ɣ ر Z ς ˇ ὦ >
50 g/L ξ ɣ λ ɣ ч ’
ˆ ˽ Y ۱ ≈ Î б DAPT
SAPT Σ P2Y12 ρ □ Ä Ж ì ə ɟ Ⱶ S
˝ [97] ۹ ɣ S ژ خ б
Ь ، يخ ۔ ج ɣ б سر شي β
DAPT ضSAPT Σ P2Y12 ρ □ Ä Ж ì
ə ɟ Ⱶ S ˝ شي d ɣ DAPT D
DAPT S ν ؏ P2Y12 ρ □ Ä Ж ì
ə ɟ Ⱶ S ˝ ⅔ شي ɣ خ
<70~80 g/L خ S ثني

Ạ سم я ۸ ɧ S ɣ Î
5. ѫ ɣ ر Z ς Ā ă ѫ
" ɣ ۱ ɣ Î б Ь ، يخ ۔
ج ɣ б سر شي β DAPT ضSAPT
SAPT Σ P2Y12 ρ □ Ä Ж ì ə ɟ Ⱶ S
˝ [98] ν خ
خ ثني Ạ سم я ۸
ɧ S ɣ Î
Ẑ / ⇔ ، ثني
[99]
ˏ
1. ACS л z˛ سج
⇔ ۷ ؏ Ж z˛ سج 75~325 mg/d я
ˋ ⇔ ۔ ج z˛ سج ыі
б z˛ سج ə ɟ Ⱶ + مج P بم
Î ژ ئ
2. ف ق D DAPT ˋ
ǒ ƶ я ă DAPT ˋ
л ، S z˛ سج ’ ə ɟ Ⱶ S
˝ Î
3. ژ DAPT ۷ ì ۱
˽ ˋ S PAD ă л ⇔ S
Σ ˜ ī u · ۷ ؏ ، ثني
Ạ مج P بم ì ə ɟ Ⱶ S ˝ Î F
z˛ سج Л ˜ ⇔ ì مج B خ
⇔ مج [100] Î ۤ ۷ ⇔ S ۱
ă بم ˽ ⇔ ۱
ă F بم Î
ǰ ă ، ثني ˽ Ẓ
، ثني ˏ
1. ، ثني ˏ
1 75 L Ⱨ ˋ ˙ ۷ ă ă يج ۷ Ạ
ɣ ۱ ɣ ƶ ۤ ۷ ɣ Ɓ ˛ я F
z˛ سج ì ə ɟ Ⱶ ì مج P بم ƶ بم ،
ثني ψ’ Ж ژ
ۏ Î ă ɣ я Ή Σ F ɣ
ν ə ɟ Ⱶ ƶ مج P بم Î’ ق
ف خ ۷ Ƹ PCI ˋ Ƹ Ы DES

z ¸ سج S مجه P بم ᾶ ¥

ʁ Ή ؤ ə ʝ Ͱ S ̈ Î ɣ ھ فح

D DAPT D 3~9ˆ ’ ؤ

SAPT Î ʁ Ή ثي Ϊ S Ẕ ھ

سم ، ثي ئز ثر Î

2. ، ثي ´

1 ʎ ʎ ¸ ˋ S TIA ᾶ

F Ă نم Ч D

F ، ثي Î ∏ ¸ ¸ ˋ

ᾶ F ، ثي ʁ Ή Ă

130/80 mmHg 1 mmHg=0.133 kPa Ή ¸ Î 2

˜ ˋ ثر ظم نجم л ;;;; ˅

ᾶ ν ˅ ˛ Δ ì

[1] Bittl JA, Baber U, Bradley SM, et al. Duration of dual antiplatelet therapy: a systematic review for the 2016 ACC/AHA guideline focused update on duration of dual antiplatelet therapy in patients with coronary artery disease: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines[J]. J Am Coll Cardiol, 2016,68(10):1116-1139. DOI: 10.1016/j.jacc.2016.03.512.

[2] ˋ ˚ ˛ ’ Y ˧ ’ ħ Y , ˋ ˚ ˧ ‌ﯖ ˥ ῲ ᵟ Y . ˧ ˥ ST ﻫﺔ ῦ ˧ ﺷﻬﻴﻲ ﺉ ʑ ﺭ 2019 [J] . ˋ ˚ ˧ ﯖ ˥ ,2019,47 (10): 766-783. DOI: 10.3760/cma.j.issn.0253-3758.2019.10.003.

[3] Valgimigli M, Bueno H, Byrne RA, et al. 2017 ESC focused update on dual antiplatelet therapy in coronary artery disease developed in collaboration with EACTS: the Task Force for dual antiplatelet therapy in coronary artery disease of the European Society of Cardiology (ESC) and of the European Association for Cardio-Thoracic Surgery (EACTS)[J]. Eur Heart J, 2018,39(3):213-260. DOI: 10.1093/eurheartj/ehx419.

[4] ˛ ˜Y , ﺻﺮﯖ , ﺑُ . Ӂ ῦ z ˛ ﺳﺢ ˋ ﺭ ﬕ [J]. ’ , 2006,11(7):427-430.DOI 10.3969/j.issn.1008-7125.2006.07.011.

[5] Leung FW. Risk factors for gastrointestinal complications in aspirin users: review of clinical and experimental data[J]. Dig Dis Sci, 2008,53(10):2604-2615. DOI: 10.1007/s10620-007-0178-6.

[6] Huang JQ, Sridhar S, Hunt RH. Role of

ulcer disease: a meta-analysis[J]. Lancet, 2002,359(9300):14-22. DOI: 10.1016/S0140-6736(02)07273-2.

[7] Yeomans ND, Lanas AI, Talley NJ, et al. Prevalence and incidence of gastroduodenal ulcers during treatment with vascular protective doses of aspirin[J]. Aliment Pharmacol Ther, 2005,22(9):795-801. DOI: 10.1111/j.1365-2036.2005.02649.x.

[8] Leung Ki EL, Chan FK. Interaction of
infection and low-dose aspirin in the upper gastrointestinal tract: implications for clinical practice[J]. Best Pract Res Clin Gastroenterol, 2012,26(2):163-172. DOI: 10.1016/j.bpg.2012.01.006.

[9] ˋ ả ˛ ˭ ˛ Y ˧ ˛ ˭ ħ Y , ˋ ả ˛ ˭ ˛ Y ˧ ˛ ˭ ħ Y ﯿﺦ ˊ ˙ ῲ ᵟ Y , ˋ ˚ ˛ ’ Y ˜ ’ ħ Y , . ˧ ⻁ ҳ л ˥ ، ﯿﺦ л ɏ ’ ˊ [J] . ˋ ˚ ﯖ ˥ ,2016,55 (10): 813-824. DOI: 10.3760/cma.j.issn.0578-1426.2016.10.021.

[10] Lanas A, García-Rodríguez LA, Arroyo MT, et al. Risk of upper gastrointestinal ulcer bleeding associated with selective cyclo-oxygenase-2 inhibitors, traditional non-aspirin non-

Gut, 2006,55(12):1731-1738. DOI: 10.1136/gut.2005.080754.

[11] Yusuf S, Zhao F, Mehta SR, et al. Effects of clopidogrel in addition to aspirin in patients with acute coronary syndromes without ST-segment elevation[J]. N Engl J Med, 2001,345(7):494-502. DOI: 10.1056/NEJMoa010746.

[12] Diener HC, Bogousslavsky J, Brass LM, et al. Aspirin and clopidogrel compared with clopidogrel alone after recent ischaemic stroke or transient ischaemic attack in high-risk patients (MATCH): randomised, double-blind, placebo-controlled trial[J]. Lancet, 2004,364(9431):331-337. DOI: 10.1016/S0140-6736(04)16721-4.

[13] DiNicolantonio JJ, D Ascenzo F, Tomek A, et al. Clopidogrel is safer than ticagrelor in regard to bleeds: a closer look at the PLATO trial[J]. Int J Cardiol, 2013,168(3):1739-1744. DOI: 10.1016/j.ijcard.2013.06.135.

[14] ﺑﻢ , ʞ , ˧ , . ᵊ ᶧ Ͱ ʑ ˥ ˧ ﻮٕ ˥ ʑ ˥ Meta ħ ﺦ [J]. ˋ ả ˏ ’ ﯖ ˥ ,2017,33(4):359-362. DOI 10.13699/j.cnki.1001-6821.2017.04.019.

[15] Belcaro G, De Simone P. Long-term evaluation of indobufen in peripheral vascular disease[J]. Angiology, 1991,42(1):8-14. DOI: 10.1177/000331979104200102.

[16] Barillà F, Pulcinelli FM, Mangieri E, et al. Clopidogrel plus indobufen in acute coronary syndrome patients with hypersensitivity to aspirin undergoing percutaneous coronary intervention[J]. Platelets, 2013,24(3):183-188. DOI: 10.3109/09537104.2012.686072.

[17] Uchiyama S, Shinohara Y, Katayama Y, et al. Benefit of cilostazol in patients with high risk of bleeding: subanalysis of cilostazol stroke prevention study 2[J]. Cerebrovasc Dis, 2014,37(4):296-303. DOI: 10.1159/000360811.

study[J]. Lancet Neurol, 2008,7(6):494-499. DOI: 10.1016/S1474-4422(08)70094-2.

[25] Shinohara Y, Katayama Y, Uchiyama S, et al. Cilostazol for prevention of secondary stroke (CSPS 2): an aspirin-controlled, double-blind, randomised non-inferiority trial[J]. Lancet Neurol, 2010,9(10):959-968. DOI: 10.1016/S1474-4422(10)70198-8.

[26] RESTART Collaboration. Effects of antiplatelet therapy after stroke due to intracerebral haemorrhage (RESTART): a randomised, open-label trial[J]. Lancet, 2019,393(10191):2613-2623. DOI: 10.1016/S0140-6736(19)30840-2.

[27] Andreotti F, Rocca B, Husted S, et al. Antithrombotic therapy in the elderly: expert position paper of the European Society of Cardiology Working Group on Thrombosis[J]. Eur Heart J, 2015,36(46):3238-3249. DOI: 10.1093/eurheartj/ehv304.

[28] Capodanno D, Angiolillo DJ. Antithrombotic therapy in patients with chronic kidney disease[J]. Circulation, 2012,125(21):2649-2661. DOI: 10.1161/CIRCULATIONAHA.111.084996.

[29] [illegible] [J]. [illegible] ,2016,44(5):454-459.DOI:1671-3826 2016 05-0454-06.

[30] Park KH, Jeong MH, Ahn Y, et al. Comparison of short-term clinical outcomes between ticagrelor versus clopidogrel in patients with acute myocardial infarction undergoing successful revascularization; from Korea Acute Myocardial Infarction Registry-National Institute of Health[J]. Int J Cardiol, 2016,215:193-200. DOI: 10.1016/j.ijcard.2016.04.044.

[31] Qian Y, Bi Q. Systematic study of cilostazol on secondary stroke prevention: a meta-analysis[J]. Eur J Med Res, 2013,18:53. DOI: 10.1186/2047-783X-18-53.

[32] Sacco RL, Diener HC, Yusuf S, et al. Aspirin and extended-release dipyridamole versus clopidogrel for recurrent stroke[J]. N Engl J Med, 2008,359(12):1238-1251. DOI: 10.1056/NEJMoa0805002.

[33] Johnston SC, Amarenco P, Albers GW, et al. Ticagrelor versus aspirin in acute stroke or transient ischemic attack[J]. N Engl J Med, 2016,375(1):35-43. DOI: 10.1056/NEJMoa1603060.

[34] Berger PB, Bhatt DL, Fuster V, et al. Bleeding complications with dual antiplatelet therapy among patients with stable vascular disease or risk factors for vascular disease: results from the Clopidogrel for High Atherothrombotic Risk and Ischemic Stabilization, Management, and Avoidance (CHARISMA) trial[J]. Circulation, 2010,121(23):2575-2583. DOI: 10.1161/CIRCULATIONAHA.109.895342.

[35] Rahman H, Khan SU, Nasir F, et al. Optimal duration of aspirin plus clopidogrel after ischemic stroke or transient ischemic attack[J]. Stroke, 2019,50(4):947-953. DOI: 10.1161/STROKEAHA.118.023978.

10.1080/03602530902722679.

[53] Uno M, Toi H, Hirai S. Chronic subdural hematoma in elderly patients: is this disease benign?[J]. Neurol Med Chir (Tokyo), 2017,57(8):402-409. DOI: 10.2176/nmc.ra.2016-0337.

[54] Taha AS, Angerson WJ, Prasad R, et al. Clinical trial: the incidence and early mortality after peptic ulcer perforation, and

drugs[J]. Aliment Pharmacol Ther, 2008,28(7):878-885. DOI: 10.1111/j.1365-2036.2008.03808.x.

[55]

gastrointestinal bleeding associated with low-dose aspirin[J]. Best Pract Res Clin Gastroenterol, 2012,26(2):125-140. DOI: 10.1016/j.bpg.2012.01.011.

[56] Avezum A, Makdisse M, Spencer F, et al. Impact of age on management and outcome of acute coronary syndrome: observations from the Global Registry of Acute Coronary Events (GRACE)[J]. Am Heart J 2005 149(1):67-73. DOI: 10.1016/j.ahj.2004.06.003.

[57]

term ticagrelor in patients with prior myocardial infarction: results from the PEGASUS-TIMI 54 trial[J]. J Am Coll Cardiol, 2017,70(5):527-538. DOI: 10.1016/j.jacc.2017.05.063.

[58] Hilkens NA, Algra A, Kappelle LJ, et al. Early time course of major bleeding on antiplatelet therapy after TIA or ischemic stroke[J]. Neurology, 2018,90(8):e683-e689. DOI: 10.1212/WNL.0000000000004997.

[59] Rumalla K, Mittal MK. Gastrointestinal bleeding in acute ischemic stroke: a population-based analysis of hospitalizations in the United States[J]. J Stroke Cerebrovasc Dis, 2016,25(7):1728-1735. DOI: 10.1016/j.jstrokecerebrovasdis.2016.03.044.

[60]

in the elderly for stroke prevention: a systematic review and meta-analysis[J]. Eur J Neurol, 2018,25(10):1276-1284. DOI: 10.1111/ene.13695.

[61] McNeil JJ, Wolfe R, Woods RL, et al. Effect of aspirin on cardiovascular events and bleeding in the healthy elderly[J]. N Engl J Med, 2018,379(16):1509-1518. DOI: 10.1056/NEJMoa1805819.

[62] Hansson L, Zanchetti A, Carruthers SG,et al. Effects of intensive blood-pressure lowering and low-dose aspirin in patients with hypertension: principal results of the Hypertension Optimal Treatment (HOT) randomised trial. HOT Study Group[J]. Lancet,1998,351(9118):1755-1762. DOI: 10.1016/s0140-6736(98)04311-6.

[63] Melloni C, Cornel JH, Hafley G, et al. Impact of chronic kidney disease on long-term ischemic and bleeding outcomes in medically managed patients with acute coronary syndromes: insights from the TRILOGY ACS trial[J]. Eur Heart J Acute Cardiovasc Care, 2016,5(6):443-454. DOI: 10.1177/2048872615598631.

[64] Fox K, Eikelboom JW, Shestakovska O, et al. Rivaroxaban plus aspirin in patients with vascular disease and renal dysfunction: from the COMPASS trial[J]. J Am Coll Cardiol, 2019,73(18):2243-2250. DOI: 10.1016/j.jacc.2019.02.048.

[65] Fored CM, Ejerblad E, Lindblad P, et al. Acetaminophen, aspirin, and chronic renal failure[J]. N Engl J Med 2001

345(25):1801-1808. DOI: 10.1056/NEJMoa010323.

[66] ‘ ° ¸ ’ Y ’ h Y ,‘ ° ¸ ’ Y ’ h Y ’ . ‘ å ∧ ∧ شهيي D ¥ ˜ 2019 [J]. ‘ ° ئو ∨ ,2019,52(4): 252-265. DOI 10.3760/cma.j.issn.1006-7876.2019.04.003.

[67] Segal R, Lubart E, Leibovitz A, et al. Early and late effects of low-dose aspirin on renal function in elderly patients[J]. Am J Med, 2003, 115(6):462-466. DOI: 10.1016/s0002-9343(03)00436-4.

[68] ‘ ° ¸ ’ Y ∨ ’ h Y ,‘ ° ∨ ئو ∨ ¨Ω ˚ Y . ، ثي ∧ ئي ∧ ¸ ھ ž ‘ å ´ [J]. ‘ ° ∨ ئو ∨ , 2014,42 12 :986-991. DOI 10.3760/cma.j.issn.0253-3758.2014.12.002.

[69] Mehta SR, Tanguay JF, Eikelboom JW, et al. Double-dose versus standard-dose clopidogrel and high-dose versus low-dose aspirin in individuals undergoing percutaneous coronary intervention for acute coronary syndromes (CURRENT-OASIS 7): a randomised factorial trial[J]. Lancet, 2010,376(9748):1233-1243. DOI: 10.1016/S0140-6736(10)61088-4.

[70]

dual antiplatelet therapy after acute coronary syndrome according to on-treatment platelet reactivity: the TOPIC-VASP pre-specified analysis of the TOPIC randomized study[J]. JACC Cardiovasc Interv, 2017,10(24):2560-2570. DOI: 10.1016/j.jcin.2017.08.044.

[71] Sibbing D, Aradi D, Jacobshagen C, et al. Guided de-escalation of antiplatelet treatment in patients with acute coronary syndrome undergoing percutaneous coronary intervention (TROPICAL-ACS): a randomised, open-label, multicentre trial[J]. Lancet, 2017,390(10104):1747-1757. DOI: 10.1016/S0140-6736(17)32155-4.

[72] [illegible]

clopidogrel resistance in peripheral arterial disease[J]. J Vasc Surg, 2017,66(5):1576-1586. DOI: 10.1016/j.jvs.2017.07.065.

[78] Simon T, Verstuyft C, Mary-Krause M, et al. Genetic determinants of response to clopidogrel and cardiovascular events[J]. N Engl J Med, 2009,360(4):363-375. DOI: 10.1056/NEJMoa0808227.

[79] Mega JL, Close SL, Wiviott SD, et al. Cytochrome P-450 polymorphisms and response to clopidogrel[J]. N Engl J Med, 2009,360(4):354-362. DOI: 10.1056/NEJMoa0809171.

[80] [illegible] [J]. [illegible]