立　人　醫　事　檢　驗　所
Lezen Reference Lab

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受 文 者　：貴 單位主管鈞鑒
日　　期　：2022 年 03 月 21 日
公告事項　：檢驗項目 HOMA-IR 參考值異動
說　　明　：

一、 自 2022 年 3 月 22 日起，Homeostasis Model Assessment of Insulin Resistance (HOMA-IR) 參考值異動

二、 檢驗項目 HOMA-IR，相關內容如下：

檢驗項目：Homeostasis Model Assessment of Insulin Resistance ; HOMA-IR ; 胰島素阻抗值
健保編號：09103C、09005C
健保點數：120、50
檢體採集：血清 0.5mL 與血漿 NaF 0.5mL。病人必須至少禁食 8 小時，可喝少許水。不可使用溶血檢體，抽取後應盡速送驗(或離心分裝冷藏保存，並於 48 小時內送至本所完成檢驗)。血漿檢體應與血清檢體區別(例如血清分裝檢體外標示 Serum)。
分析方法：Glucose：Hexokinase-UV/NAD ; Beckman AU5820
Insulin：ECLIA；ROCHE Cobas e801
報告時效：每天操作，當天發報告。
參考區間：

檢驗項目	原參考值	新參考值
Insulin AC	2.6-24.9 uU/mL	2.6-24.9 uU/mL　(未異動)
Glucose AC	74-109 mg/dL	74-109 mg/dL　(未異動)
Homeostasis model assessment	<2.60	**≦1.4　(正常)** **1.5～1.9　(輕微)** **≧2.0　(嚴重)**
HOMA-β	% (未提供參考值)	% (未提供參考值)　(未異動)

特此告知 造成不便 敬請見諒！

備註：1.參考資料來源：https://bit.ly/3N5aQSa　(見附件)

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Optimal Cut-Offs of Homeostasis Model Assessment of Insulin Resistance (HOMA-IR) to Identify Dysglycemia and Type 2 Diabetes Mellitus: A 15-Year Prospective Study in Chinese

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Free PMC article

Abstract

Background: The optimal reference range of homeostasis model assessment of insulin resistance (HOMA-IR) in normal Chinese population has not been clearly defined. Here we address this issue using the Hong Kong Cardiovascular Risk Factor Prevalence Study (CRISPS), a prospective population-based cohort study with long-term follow-up.

Material & methods: In this study, normal glucose tolerance (NGT), impaired fasting glucose (IFG), impaired glucose tolerance (IGT) and type 2 diabetes mellitus (T2DM) were defined according to the 1998 World Health Organization criteria. Dysglycemia referred to IFG, IGT or T2DM. This study comprised two parts. Part one was a cross-sectional study involving 2,649 Hong Kong Chinese subjects, aged 25-74 years, at baseline CRISPS-1 (1995-1996). The optimal HOMA-IR cut-offs for dysglycemia and T2DM were determined by the receiver-operating characteristic (ROC) curve. Part two was a prospective study involving 872 subjects who had persistent NGT at CRISPS-4 (2010-2012) after 15 years of follow-up.

Results: At baseline, the optimal HOMA-IR cut-offs to identify dysglyceia and T2DM were 1.37 (AUC = 0.735; 95% confidence interval [CI] = 0.713-0.758; Sensitivity [Se] = 65.6%, Specificity [Sp] = 71.3%] and 1.97 (AUC = 0.807; 95% CI = 0.777-0.886; Se = 65.5%, Sp = 82.9%) respectively. These cut-offs, derived from the cross-sectional study at baseline, corresponded closely to the 75th (1.44) and 90th (2.03) percentiles, respectively, of the HOMA-IR reference range derived from the prospective study of subjects with persistent NGT.

Conclusions: HOMA-IR cut-offs, of 1.4 and 2.0, which discriminated dysglycemia and T2DM respectively from NGT in Southern Chinese, can be usefully employed as references in clinical research involving the assessment of insulin resistance.

Figures