

# IgG

IgG		IgG		IgG	
IgG		IgG		2019	10 12
IgG		IgG		( )	
IgG		IgG		SPSS 25.0	
IgG		IgG		291	37 (19 ~82 )
141	38 (19 ~82 )	150	38 (20 ~78 )		
IgG		IgG		20.579(43.618) AU/mL 28.387(48.158) AU/mL	
(P=0.011)		IgG			
111.405 AU/mL	181.888 AU/mL				
IgG		IgG			

**The biological reference intervals for Aspergillus IgG antibody** Zhong Ni, Guo Jian, Shen Hui, Zhang Min, Wang Lili, Guo Wenzheng, Wang Dongjiang, Wu Wenjuan. Department of Laboratory Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai 200123, China  
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**Abstract Objective** Chronic pulmonary aspergillosis (CPA) is easy to be concealed by its underlying diseases and difficult to diagnose, the mortality rate is high if it is not treated in time. It is suggested by clinical guideline that Aspergillus specific antibody IgG is a key index in the diagnosis of CPA. However, most of the current clinical data of Aspergillus specific antibody IgG are from European countries. And the biological reference interval of Aspergillus specific antibody IgG in Chinese remains to be determined. Therefore, the purpose of this study is to establish the biological reference interval of Aspergillus specific antibody IgG in our laboratory. **Methods** The serum of the healthy individuals who had physical examination in our hospital from October to December 2019 was randomly collected. The serum was measured by enzyme-linked immunosorbent assay (ELISA) with Aspergillus specific antibody IgG test kit from Dynamiker. Statistical analysis software SPSS 25.0 was used to establish a biological reference interval suitable for our laboratory in accordance with the requirements of CLSI-EP28-A3c. **Results** 291 healthy individuals with a median age of 37 (range 19~82 years old) were included, including 141 males, 38 (range 19~82 years old) and 150 females, 38 (range 20~78 years old). The levels of serum Aspergillus specific antibody IgG in male and female healthy adults were 20.579 (43.618) AU/mL and 28.387 (48.158) AU/mL, respectively. The difference was statistically significant (P=0.011). Therefore, the reference interval of Aspergillus specific antibody IgG level was established separately between male and female, which was less than 111.405 AU/mL for male and less than 181.888 AU/mL for female. **Conclusions** The biological reference interval of Aspergillus specific antibody IgG in the serum of the laboratory was preliminarily

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established according to different genders, which provided a reference standard for clinical diagnosis of related diseases.

**Key words** Biological reference interval; Aspergillus specific antibody IgG; Chronic pulmonary aspergillosis

(Chronic Pulmonary Aspergillosis, CPA)

291 37 (19 ~82 )

300 141 38 (19 ~82 )

CPA<sup>[1]</sup> 1 5 10 86% 62% 150 38 (20 ~78 )

47%<sup>[2]</sup> CPA 100% 2.

CPA 4 mL~5 mL 3000 r/min

CPA 10 min -8 0

CPA 3. ADC ELISA 200 IgG

( )

IgG ( )

IgG

CPA 26% IgG 99%

CPA IgG<sup>[3]</sup> 2016 IgG TMB

(IDSA) 450 nm IgG

(ESCMID) (ERS) IgG

CPA<sup>[4,5]</sup> 4. (CLSI)EP28-A3c IgG

IgG CPA (CLSI)EP28-A3c 291 IgG

IgG

(D) (R)

D 1/3R

IgG 2

(CLSI)EP28-A3c 1/3R

[6]

IgG 5. SPSS 25.0

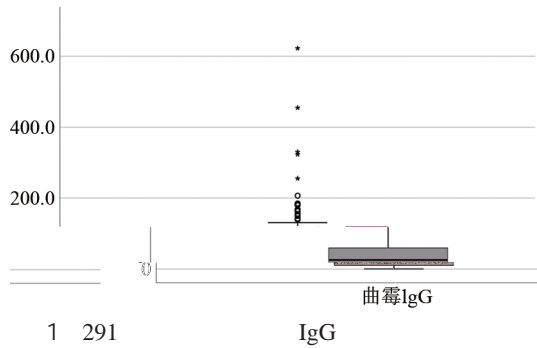
IgG

( $\bar{x} \pm 1.96 s$ ) 95%

1. 2019 10 12 P5 P95

CT

1. IgG [7-9] CPA  
 291 IgG [10]  
 1 SPSS 25.0 CPA  
 “ 622.624” CLSI-EP28-A3c  
 D  
 IgG  
 R D/R 1/3



IgG (2016 ) IDSA [4]  
 IgG  
 IgG  
 IgG [11]

2. IgG  
 291 IgG  
 141 150  
 ( P75~P25) 38 (19 )  
 38 (16) (P= )  
 0.906) IgG  
 ( P75~P25) 20.579(43.618) AU/mL  
 28.387(48.158) AU/mL (P= )  
 0.011 1)

IgG	
IgG	111.405 AU/mL
IgG	181.888 AU/mL

IgG  
 ( 2) IgG  
 EP28-A3c  
 ( $\bar{x} \pm 1.96 s$ )  
 P95 IgG  
 95% 1/10

[12] IgG  
 CPA IgG( ) CUT-OFF

	1 291	IgG		P
(n)	291	141	150	
( )	37(18)	38(20)	38(16)	0.906
IgG(AU/mL)	25.493(50.061)	20.579(43.618)	28.387(48.158)	0.011
P95	151.829	111.405	181.888	

IgG

89.3 AU/mL  
94.4%<sup>[13]</sup>

CPA CUT-

OFF 121

IgG  
2.0 mgA/L~68.7 mgA/L<sup>[14]</sup>

137 CPA 50

IgG( )

CUT-OFF 27.3 mgA/L

95.6% 100%<sup>[15]</sup>

IMMULITE 2000( )

20 mgA/L CPA cut-off<sup>[16]</sup>

CPA

IgG

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