

- [13] CASTRO-RODRIGUEZ J A. The Asthma Predictive Index: early diagnosis of asthma[J]. *Curr Opin Allergy Clin Immunol*, 2011, 11: 157-161.
- [14] TENERO L, PIAZZA M, PIACENTINI G. Recurrent wheezing in children[J]. *Transl Pediatr*, 2016, 5: 31-36.
- [15] CASTRO-RODRÍGUEZ J A, HOLBERG C J, WRIGHT A L, MARTINEZ F D. A clinical index to define risk of asthma in young children with recurrent wheezing[J]. *Am J Respir Crit Care Med*, 2000, 162(4 Pt 1): 1403-1406.
- [16] GUILBERT T W, MORGAN W J, KRAWIEC M, LEMANSKE R F Jr, SORKNESS C, SZEFLER S J, et al; Prevention of Early Asthma in Kids Study, Childhood Asthma Research and Education Network. The Prevention of Early Asthma in Kids study: design, rationale and methods for the Childhood Asthma Research and Education network[J]. *Control Clin Trials*, 2004, 25: 286-310.
- [17] KURUKULAAARATCHY R J, MATTHEWS S, HOLGATE S T, ARSHAD S H. Predicting persistent disease among children who wheeze during early life[J]. *Eur Respir J*, 2003, 22: 767-771.
- [18] DEVULAPALLI C S, CARLSEN K C, HÅLAND G, MUNTHE-KAAS M C, PETERSEN M, MOWINCKEL P, et al. Severity of obstructive airways disease by age 2 years predicts asthma at 10 years of age[J]. *Thorax*, 2008, 63: 8-13.
- [19] CAUDRI D, WIJGA A, A SCHIPPER C M, HOEKSTRA M, POSTMA D S, KOPPELMAN G H, et al. Predicting the long-term prognosis of children with symptoms suggestive of asthma at pre-school age[J]. *J Allergy Clin Immunol*, 2009, 124: 903-910.
- [20] DURRANI S, GUILBERT T W. Early treatment in preschool children: an evidence-based approach[J]. *Curr Opin Allergy Clin Immunol*, 2015, 15: 175-183.
- [21] HE X Y, SIMPSON J L, WANG F. Inflammatory phenotypes in stable and acute childhood asthma[J]. *Paediatr Respir Rev*, 2011, 12: 165-169.
- [22] [J/CD]. (),2013,6:341-345.
- [23] CISNEROS SERRANO C, MELERO MORENO C, ALMONACID SÁNCHEZ C, PERPIÑÁ TORDERA M, PICADO VALLES C, MARTÍNEZ MORAGÓN E, et al. Guidelines for severe uncontrolled asthma[J]. *Arch Bronconeumol*, 2015, 51: 235-246.
- [24] GARCIA-AYMERICH J, BENET M, SAEYS Y, PINART M, BASAGAÑA X, SMIT H A, et al. Phenotyping asthma, rhinitis and eczema in MeDALL population-based birth cohorts: an allergic comorbidity cluster[J]. *Allergy*, 2015, 70: 973-984.
- [25] HOWRYLAK J A, FUHLBRIGGE A L, STRUNK R C, ZEIGER R S, WEISS S T, RABY B A; Childhood Asthma Management Program Research Group. Classification of childhood asthma phenotypes and long-term clinical responses to inhaled anti-inflammatory medications[J]. *J Allergy Clin Immunol*, 2014, 133: 1289-1300.
- [26] SPYCHER B D, KUEHNI C E. Asthma phenotypes in childhood: conceptual thoughts on stability and transition[J]. *Eur Respir J*, 2016, 47: 362-365.
- [27] ZIORA D, SITEK P, MACHURA E, ZIORA K. [Bronchial asthma in obesity—a distinct phenotype of asthma?] [J]. *Pneumonol Alergol Pol*, 2012, 80: 454-462.
- [28] CASTRO-RODRIGUEZ J A. A new childhood asthma phenotype: obese with early menarche[J]. *Paediatr Respir Rev*, 2016, 18: 85-89.
- [29] ONG M S, UMETSU D T, MANDL K D. Consequences of antibiotics and infections in infancy: bugs, drugs, and wheezing[J]. *Ann Allergy Asthma Immunol*, 2014, 112: 441-445.
- [30] GALO BARDES B, GRANELL R, STERNE J, HUGHES R, MEJIA-LANCHEROS C, DAVEY SMITH G, et al. Childhood wheezing, asthma, allergy, atopy, and lung function: different socioeconomic patterns for different phenotypes[J]. *Am J Epidemiol*, 2015, 182: 763-774.
- [31] RAEDLER D, BALLEMBERGER N, KLUCKER E, BÖCK A, OTTO R, PRAZERES DA COSTA O, et al. Identification of novel immune phenotypes for allergic and nonallergic childhood asthma[J]. *J Allergy Clin Immunol*, 2015, 135: 81-91.
- [32] SÁNCHEZ-ZAUCO N, DEL RIO-NAVARRO B, GALLARDO-CASAS C, DEL RIO-CHIVARDI J, MURIEL-VIZCAINO R, RIVERA-PAZOS C, et al. High expression of Toll-like receptors 2 and 9 and Th1/Th2 cytokines profile in obese asthmatic children[J]. *Allergy Asthma Proc*, 2014, 35: 34-41.
- [33] DIZIER M H, MARGARITTE-JEANNIN P, MADORE A M, MOFFATT M, BROSSARD M, LAVIELLE N, et al. The nuclear factor I/A (NFIA) gene is associated with the asthma plus rhinitis phenotype[J]. *J Allergy Clin Immunol*, 2014, 134: 576-582.
- [34] BAINES K J, SIMPSON J L, WOOD L G, SCOTT R J, FIBBENS N L, POWELL H, et al. Sputum gene expression signature of 6 biomarkers discriminates asthma inflammatory phenotypes[J]. *J Allergy Clin Immunol*, 2014, 133: 997-1007.
- [35] MORTENSEN L J, KREINER-MØLLER E, HAKONARSON H, BØNNELYKKE K, BISGAARD H. The PCDH1 gene and asthma in early childhood[J]. *Eur Respir J*, 2014, 43: 792-800.
- [36] PARK H W, DAHLIN A, TSE S, DUAN Q L, SCHUEMANN B, MARTINEZ F D, et al. Genetic predictors associated with improvement of asthma symptoms in response to inhaled corticosteroids[J]. *J Allergy Clin Immunol*, 2014, 133: 664-669.