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摘要：

目的: 研究吲哚胺2，3 双加氧酶（indoleamine 2，3 dioxygenase，IDO）在慢性粒细胞性白血病源性树突状细胞
myeloid leukemia，CML DCs）中的表达，及抑制IDO活性对CML DCs免疫刺激功能的影响。方法: RT PCR检测17例患
流式细胞仪检测CML DCs免疫表型。在有或无IDO抑制剂1 甲基色氨酸（1 methyltroptophan,1 MT）作用下，分别以不
s（mDCs）为刺激细胞，完全缓解期（complete remission，CR）CML患者外周T淋巴细胞为反应细胞建立混合淋巴细胞
IL 12水平，MTT法检测CML DCs刺激自体T淋巴细胞的增殖能力。结果: 随着CML DCs的诱导分化和成熟，IDO mRNA
表型除CD1a外，CD80、CD86、CD83、HLA DR的表达均明显上调(P <0 05)，且上述分子的表达不受1 MT的影响
Cs，其IL 12水平均明显增加(P <0 05， P <0 01)，且激发自体T淋巴细胞增殖的能力也明显增强(P <0.05,
高CML DCs的IL 12分泌水平，增强其对自体T细胞增殖的刺激能力，IDO对DCs的负性调节为白血病生物治疗提供了新的思

关键词：慢性粒细胞性白血病; 吲哚胺2 3-双加氧酶; 树突状细胞; 1 甲基色氨酸

Inhibition of indoleamine 2,3-dioxygenase activity promotes function of dendritic cells derived from leukemia Download Fulltext

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Abstract:

Objective:To investigate the expression of indoleamine 2,3 dioxygenase (IDO) in dendritic cells derive
（CML DCs）and to study the influence of IDO inhibition on the function of CML DCs. Methods: The expres
derived from 17 patients with chronic myeloid leukemia was detected by RT PCR. The phenotypes of
cytometry. The immature CML DCs (imDCs) and the mature CML DCs (mDCs) were used as stimulating c
were used as reactive cells for a mixed lymphocyte reaction system. IL 12 concentration was detected by
was analyzed by MTT assay. Results: It was demonstrated that DCs derived from bone marrow mononuc
morphology of DCs. Expressions of co stimulatory molecules on DCs, such as CD80, CD86, CD83 and HLA
obviously higher after maturation (P <0.05) and were not influenced by 1 Methyltroptophan(1 MT, an
activity in mature and immature DCs by 1 MT significantly enhanced their abilities to activate T cells p
P <0.05, P <0.01).Conclusion: Inhibition of IDO activity in CML DCs can increase their abilities to pro
T cells. Negative regulation of DCs by IDO paves a way for DC based leukemia immunotherapy.

Keywords:chronic myeloid leukemia; indoleamine 2 3 dioxygenase; dendritic cell; 1 methyltryptophan