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# T Cell Repertoire Bias toward Recognition of Major Histocompatibility Complex Molecules: Genomic or Somatic Selection?

Damir Vidovic, Jeanmarie Guenot[1], Zoltan A. Nagy
*Departments of Immunology and [1]Metabolic Diseases, Preclinical Research, Hoffmann-La Roche, Inc., Nutley, NJ, USA*

The current, widely accepted view about the T cell repertoire is that it is heavily influenced by thymic positive selection during ontogeny. In this article, this concept is confronted with an old idea postulating a dominant role of genetic (i.e., evolutionary) factors in shaping the recognition potential of the mature T cells. The results of our recent study on the helper T cell repertoire from mice deficient of major histocompatibility complex class II a-chains, but expressing functional b-chains, are not readily interpreted without introducing a new version of the old idea: complementarity to the major histocompatibility complex peptide binding site is a major evolutionary selective pressure on the T cell antigen receptor variable genes, and alloreactivity is a reflection of this fact.

***Key words:*** *evolution; lymphocyte selection; major histocompatibility complex; thymus; T lymphocytes*

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**Correspondence to:**
Dr Damir Vidovic
Department of Immunology
Preclinical Research
Hoffmann-La Roche, Inc.
340 Kingsland Street, Nutley
NJ 07110-1199
USA