

Letters to the Editor

Sir,

RAST, PRIST, IgG-RAST: suggestions for an improved terminology of in vitro IgE diagnostics

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For many years the diagnosis of allergy was confined to *in vivo*-assays, mostly involving the patient by testing his skin or by exposing a certain target organ to a provocative antigenic stimulus. With the discovery of immunoglobulin E and the development of radioimmunoassays for the detection of total and specific IgE *in vitro*, IgE tests have become clinical routine in allergy. However, this impressive progress is accompanied by an equally fascinating confusion in terminology of abbreviations. Radioimmunosorbent test (RIST), radioallergosorbent test (RAST) and paper radioimmunosorbent test (PRIST) are the best known examples, but not the most logical ones. Here and there one already meets the term 'IgG-RAST' for the detection of allergen-specific antibodies of the IgG class.

While the term 'RAST' originally was confined to a procedure detecting specific antibodies of the IgE class, many people tend to regard it as a mere description of a

Table 1. Suggestions for an improved terminology of *in vitro* allergy diagnostics

Present term	Terminology giving information about:			
	Antibody detected	Marker (test principle)	Sorbent	New abbreviation
R I S T (radioimmunosorbent test)	<u>T</u> otal Ig <u>E</u>	<u>R</u> I <u>A</u>	<u>S</u> ephadex	T E - R I A (s)
P R I S T (paper radioimmunosorbent test)	<u>T</u> otal Ig <u>E</u>	<u>R</u> I <u>A</u>	<u>P</u> aper	T E - R I A (p)
R A S T (now) (radioallergosorbent test)	<u>S</u> pecific Ig <u>E</u>	<u>R</u> I <u>A</u>	<u>P</u> aper	S E - R I A (p)
R A S T (originally)	<u>S</u> pecific Ig <u>E</u>	<u>R</u> I <u>A</u>	<u>S</u> ephadex	S E - R I A (s)
'IgG-R A S T'	<u>S</u> pecific Ig <u>G</u>	<u>R</u> I <u>A</u>	<u>P</u> aper	S G - R I A (p)
IgE enzyme immunoassay	<u>T</u> otal Ig <u>E</u>	<u>E</u> I <u>A</u>	<u>T</u> est <u>t</u> ube	T E - E I A (t)
IgE enzyme immunoassay	<u>T</u> otal Ig <u>E</u>	<u>E</u> I <u>A</u>	<u>P</u> aper	T E - E I A (p)
IgG E L I S A (Enzyme-linked immunosorbent test)	<u>S</u> pecific Ig <u>G</u>	<u>E</u> I <u>A</u>	<u>T</u> est <u>t</u> ube	S G - E I A (t)

EIA = Enzyme immunoassay; RIA = radioimmunoassay.

technical principle. But even considered thus it is no longer logical, for originally, RAST was performed using Sephadex particles as sorbent similar to the RIST. Later paper discs were introduced; logically 'RAST' should be called 'PRAST'.

It will be even more confusing when enzyme immunoassays are introduced in the near future. Therefore some suggestions are offered in Table 1 for an improved terminology of *in vitro* IgE diagnostic tests. The abbreviations proposed give information about (1) what shall be measured (antibody, specific or total), (2) the technique used (marker, sorbent) considering both radio- and enzyme immunoassays.

It should be emphasized that this list of possible abbreviations represents only a suggestion in the hope that responsible clinicians and scientists might join in an effort to avoid more confusion in this field.

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Sir,

Prostaglandins in exercise-induced asthma

(Received 3 February 1981; accepted for publication 16 March 1981)

Amongst the many biochemical pathways capable of inducing airways obstruction in asthma, the role of prostaglandins has received little attention. We gave a single 25-mg dose of indomethacin, orally, to sixteen children known to have exercise-induced asthma (EIA); they performed a pair of running tests on a treadmill, on each of 2 days: before and 90 min after the drug, and before and 90 min after a placebo. The interval between paired tests was 2 hours. The change in peak expiratory flow rate (PEFR) after exercise was used as the index of EIA. Our intention was to assess the role of prostaglandins as mediators of EIA.

There was a greater scatter of responses to indomethacin than to placebo; the mean difference in the fall in PEFR between the two placebo tests was 4.6% ($\pm 6.4\%$); the mean difference between indomethacin studies was 7.4% ($\pm 16.0\%$). In five children (31%), the difference between the tests on the indomethacin day was greater than the upper limit of confidence (12.8%) and these children were therefore considered to have shown a significant response to indomethacin: the drug was able to protect entirely in cases 1 and 7 and partially in cases 5, 9 and 15 (Table 1). This is indirect evidence that prostaglandins are involved in the pathogenesis of EIA, in some asthmatics.

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