



A Comparison of Pharmaceutical Research and Development Spending 2002 Proposed Methodology

As announced in the Research Agenda 2000-2005, the PMPRB is presently conducting a study comparing R&D spending by the brand name pharmaceutical industry in Canada and other major industrialized countries. This work is meant to update and extend an earlier PMPRB study published in 1997.¹

The following provides a brief description of the methodology proposed for this study.

Coverage

The study will concentrate on comparisons with France, Germany, Italy, Sweden, Switzerland, the United Kingdom and the United States. These are the seven countries listed in the *Patented Medicines Regulations* which the PMPRB is required to use for purposes of carrying out its regulatory mandate under the *Patent Act*. The study will also include some information for Japan and Australia.

Under the *Patent Act*, patentees who are selling medicines in Canada are required to report information on their R&D spending to the PMPRB; firms that may engage in R&D but do not make sales are not required to report. For purposes of this study, every attempt will be made to ensure comparable coverage for the countries included and to explain any differences that may be identified.

Study Period

The analysis will provide information for the period 1995 to 1999.

Indicators

The study will reproduce most of the tables and charts contained in the earlier PMPRB report, extending them to incorporate more recent information.

Measures of R&D activity to be updated will include:

- total R&D pharmaceutical expenditure;
- R&D expenditure by type of research activity;
- ratios of pharmaceutical R&D to sales;
- pharmaceutical R&D per capita; and
- distribution of pharmaceutical R&D and sales across countries.

¹ *A Comparison of Pharmaceutical Research and Development Spending*, Study Series S-9709, October, 1997.

Data Sources

Data on aggregate R&D expenditure and pharmaceutical sales will be critical elements of this analysis. The study will rely on three principal data sources:

- R&D and sales figures reported to the PMPRB by manufacturers selling patented drugs products in Canada;
- information published by pharmaceutical industry associations; and
- data released by the OECD.

Specific industry sources to be used are listed in the following table.

Industry Data Sources

Country	Trade Association	Document Name
France Germany Italy Sweden Switzerland UK Japan	European Federation of Pharmaceutical Industries and Associations (EFPIA)	The Pharmaceutical Industry in Figures - Key Data 2001 Update
US	PhRMA	Pharmaceutical Industry Profile 2001
Australia	Australian Pharmaceutical Manufacturers Association Inc.	Pharmaceutical Fact sheet

Foreign R&D and sales information used in the PMPRB's 1997 study were obtained from reports produced by the Centre for Medicines Research (CMR) in the UK. Although the CMR no longer publishes these reports, it has agreed to assist the PMPRB in reviewing the comparability of the information reported.

Company-Level Statistical Analysis

Under the *Patent Act*, the PMPRB collects and reports R&D and sales information for individual pharmaceutical patentees in Canada. This information may permit further comparisons of R&D spending in Canada to that in other countries. Examples of questions that might be addressed in this way include the following.

- Is there a relationship between a manufacturer's level of R&D spending in Canada and its global R&D spending?
- Is there a relationship between a manufacturer's R&D spending in Canada and its country of origin?

Most of the company-specific information used in this analysis will come from the PMPRB's own databases and the "Company League Tables" published by Scrip.²

² Any references to company-specific information will rely only on information already in the public domain.