Workshop on Health and Pharmaceutical Economics

Toulouse, December 15, 2011

Conference venue: TSE IDEI, Manufacture des Tabacs, 1 Rue des Amidonniers, Building S, Room Auditorium

PROGRAM

14:00-14:45 *Inducing R&D for Infectious Diseases*

Margaret Kyle (Toulouse School of Economics)

14:45-15:30 *The Effects of Regulation of Pharmaceutical Prices, Competition and Industry Margins: Structural Estimates on the Market for Anticulcer Prescription Drugs in France*

Pierre Dubois (Toulouse School of Economics) and
Laura Lasio (Toulouse School of Economics)

15:30-15:45 **Coffee break**

15:45-16:30 *Entry of New Drugs, Optimal Insurance Coverage and Reference Pricing Regulation*

David Bardey (University of Rosario & Toulouse School of Economics),
Bruno Jullien (Toulouse School of Economics) and
Jean-Marie Lozachmeur (Toulouse School of Economics)

16:30-17:15 *Margins and market shares: pharmacy incentives for generic substitution*

Kurt Brekke (Norwegian School of Economics)

Each presenter will have 35 minutes, followed by 10 minutes for the discussion.

SUMMARY

Margaret Kyle margaret.kyle@tse-fr.eu

"Inducing R&D for Infectious Diseases

Abstract

Encouraging innovation is generally important to policymakers, particularly in contexts where market forces provide insufficient incentives to private firms. An example of such a context is that of treatments for diseases most prevalent in the developing world. Because those afflicted have low ability to pay and little access to insurance, the private sector has invested relatively little in these diseases despite their significant burden. Policies for encouraging innovation include "pull" mechanisms that affect expected revenues (such as patent length and breadth, innovation prizes, and purchase commitments) as well as "push" mechanisms that reduce the cost of innovation (such as grants and tax credits for research and development (R&D)). However, empirical assessments of these policies are scarce. In this paper, we describe how the R&D landscape for neglected diseases has changed over the last decade. We combine data on funding of scientific and medical research by government agencies and by private foun- dations with information on purchase commitments, changes in patent policy, and other pull mechanisms to evaluate the success of these efforts in spurring new R&D projects. We also examine whether this R&D has resulted in successful drug candidates, and whether differences in success rates are consistent with theoretical predictions about the relative advantages and disadvantages of push and pull mechanisms.

Pierre Dubois and Laura Lasio pierre.dubois@tse-fr.eu

"The Effects of Regulation of Pharmaceutical Prices, Competition and Industry Margins: Structural Estimates on the Market for Anticulcer Prescription Drugs in France"

Abstract

This work estimates demand for the antiulcer prescription drugs in France in the period 1997-2007, so as to identify the factors that influence actual purchase decisions, estimate price elasticity, markups and marginal costs. Models of discrete choice for differentiated products are applied to data on wholesale transactions provided by IMS Health. The analysis finds out that being branded is a major competitive advantage in the French market, as expected; however, during the period under study, generics enter the market and gain significant market share, suggesting that a role was played by the reform in encouraging their use. On the supply side, the entry of generics tackles a reaction from branded manufacturers, who raise their margins, taking advantage of a segment of loyal price-insensitive customers.

David Bardey, Bruno Jullien and Jean-Marie Lozachmeur jean-marie.lozachmeur@univ-tlse1.fr

Entry of New Drugs, Optimal Insurance Coverage and Reference Pricing Regulation

Abstract:
Internal reference pricing for pharmaceuticals is now a widely used regulation tool for the pricing and reimbursement of pharmaceuticals. This type of regulation is usually used as a complement of copayment rates to decrease pharmaceutical expenditures. In this paper we determine, from a social planner's point of view, the optimal policy mix between reference pricing and copayment rate when drugs are horizontally differentiated. Our results show that in the short run *i.e.* for a fixed number of drugs, the copayment system is chosen independently of the reference price system and the reference pricing should be maximal. However, in the long run, there may be room for less than maximal reference pricing. This occurs when the equilibrium number of drugs in the therapeutic class is too small and patients would be better off with more differentiated drugs.

Kurt Brekke Kurt.Brekke@nhh.no

Margins and market shares: pharmacy incentives for generic substitution

Abstract:
"We study the impact of product margins on pharmacies' incentive to promote generics instead of brand-names. First, we construct a theoretical model where pharmacies can persuade patients with a brand-name prescription to purchase a generic version instead. We show that pharmacies' substitution incentives are determined by relative margins and relative patient copayments. Second, we exploit a unique product level panel data set, which contains information on sales and prices at both producer and retail level. In the empirical analysis, we find a strong relationship between the margins of brand-names and generics and their market shares. In terms of policy implications, our results suggest that pharmacy incentives are crucial for promoting generic sales."