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## The 1989 Lasker Award Affirms the Value of Contraceptive Research

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The Albert Lasker Clinical Medical Research Awards are certainly prestigious; indeed, they are widely regarded as comparable to the Nobel Prize. Since the Lasker awards were established in 1946, 48 winners have later been awarded Nobels, including J. Michael Bishop and Harold E. Varmus, University of California, San Francisco, who share this year's prize in medicine for their breakthrough research on oncogenes. I take pride, incidentally, in our forecast of their recognition in the October 2 issue of *The Scientist* (D. Pendlebury, "The 1989 Nobel Prize In Medicine: 20 Who Deserve It," page 14).

The 1989 Lasker award was presented to Etienne-Emile Baulieu, University of Paris-Sud, for his research on steroid hormones, which has led to the development of RU486, an oral medication that terminates pregnancy.

By honoring Baulieu's work, the Lasker jury has made a strong statement affirming the value of contraceptive research in general and RU486 in particular. According to the World Health Organization, about 70 million legal and illegal abortions are performed annually worldwide. Complications cause an

estimated 150,000 deaths each year. In some developing countries, unsafe abortions are responsible for 50% of maternal deaths. In addition, millions of women have been—and will be—physically injured by abortions. No reliable conclusions on possible psychological trauma from abortion can be drawn from the available evidence, as former U.S. Surgeon General C. Everett Koop has stated.

These appalling death and disability risks could be reduced substantially by RU486. A single oral dose blocks the action of progesterone, which enables the uterus to accept a fertilized egg. A small dose of prostaglandin administered 48 hours later induces the womb to contract and expel its contents. The treatment is 95% effective. The primary adverse side effect is prolonged uterine bleeding, which requires transfusion in about one case in a thousand.

Despite the obvious potential of RU486 to protect the lives and health of women, antiabortion groups have branded it as the "French death pill" and pressured Rousell-Uclaf, the French pharmaceutical firm, to halt distribution. In the face of boycott threats against

Rousell and its parent company, Hoechst, the firm withdrew RU486 from the market. Only after the French government threatened to seize the RU486 patent and award it to another company did Rousell again begin distribution in France. But the drug is still unavailable outside of France.

Banning RU486 will not stop abortions or even reduce their numbers. It will only prevent women from choosing a safer and more private abortion option. It also penalizes women whose abortion needs are unchallenged by proliferators—those whose pregnancies are life-threatening or the result of rape or incest.

Just as tragically, the antiabortionists' categorical rejection of RU486 will delay and perhaps prevent realization of the drug's other promising medical applications. Preliminary studies have explored the use of RU486 in treating endometriosis, a leading cause of infertility. The drug may also help

treat meningiomas, tumors of the membranes surrounding the brain, and breast cancers that are unresponsive to other hormone therapies. RU486 may also be used to induce labor, ease the delivery of stillborn fetuses and ectopic embryos, and perhaps reduce caesarean section deliveries. The drug may eventually be formulated as a novel contraceptive that would suppress ovulation, prevent rather than disrupt embryonic implantation, or induce menstruation.

The Lasker Foundation has consistently and prominently supported progressive fertility control efforts. From 1945 to 1965 it sponsored a series of awards given by Planned Parenthood-World Population. Pharmaceutical executives and political leaders, who have substantial control over women's reproductive choices, ought to emulate such a long-term commitment and not be intimidated by special interest groups. ■