

# Distorted Drug Evaluation: IRESSA and Conflicts of Interest among Experts in Japan

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1) Medwatcher Japan, Japan

## Backgrounds

### (1) Repeated drug-induced disasters in Japan

Year	Drugs	Adverse reactions
1962	Thalidomide	Phocomelia
1970	Clioquinol (Chinoform)	SMON: subacute myelo-optico-neuropathy
1970	Coralgil	Liver disease
1974	Chloroquine	Retinopathy
1984~92	HIV tainted unheated coagulation factor preparations	AIDS
1987~94	HCV tainted fibrinogen preparations	Hepatitis C
1993	Sorivudine and 5-FU	Augmentation of activity of 5-FU
2002~10	Gefitinib (IRESSA)	Interstitial Lung Disease (ILD)

### (2) Medwatcher Japan

- A non-profit organization including 17 members: 7 pharmacists, 5 attorneys, 1 physician, 1 consumer advocates, 1 thalidomide victim, 1 sociology professor and 1 medical journalism professor
- Launched in 1997, the year after the legal settlement for the tainted blood products-induced HIV litigation
- Objectives: to monitor and prevent drug-induced disasters
- Activities
  - To submit appeals, public questions and comments to governmental agencies and pharmaceutical companies regarding issues related to individual drugs
  - Law suits based on the freedom-of-information act
  - Nation wide surveys
  - Symposia
  - Lobbying activities
- Cooperating with “The Informed Prescriber” (TIP) and “Non Profit Organization Japan Institute of Pharmacovigilance” (NPOJIP)

### (3) Drug-induced accidents due to IRESSA

- IRESSA
  - An orally administered drug, gefitinib for non-small cell lung cancer
  - An epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor
  - Globally first launched by AstraZeneca in Japan

• IRESSA victims

Date	No. of deaths from ILD (After approved Jul. 5, 2002; accumulated *)
Jul. 15, 2002	1 (First report of fatality)
Dec. 31, 2002	180
Dec. 31, 2004	557
Dec. 31, 2009	799
Mar. 31, 2010	810

\* No. of deaths before approval: 34

## Objectives

- To describe the conflicts of interest involving experts, promotional advertising by pharmaceutical companies and IRESSA drug information, and examine solutions to those issues.

## Methods

- We reviewed the facts regarding conflicts of interest involving experts clarified through the IRESSA litigation and a promotional advertising disguising itself as ‘scientific drug information’. We also examined the characteristics of IRESSA drug information provided by the pharmaceutical company.

### (2) Inadequate warning statements IRESSA package insert

1st version

Current version

No warnings mentioned that interstitial pneumonia can be fatal.

Current statements in the warnings column

## Findings

### (1) Promotional advertisement masquerading as science: IRESSA’s case

Characteristics of Contents	Methods of advertising
• Emphasis on efficacy	• Directed at all parties (doctors, patients, mass media)
• Emphasize that there are few adverse reactions	• Advertisement masquerading as providing of scientific information
• No mention of interstitial pneumonia	• Predating approval

### • Promotional advertisement for medical experts: An example of IRESSA

Lung cancer and Evidence-based medicine: tailored treatment for lung cancer

ZD1839 is a drug that shows little toxicity...

Presented by AstraZeneca

• Advertisement implying that the drug has a drastic effect and no serious adverse effects: some examples of phrases in IRESSA drug information

- “The best promising molecular targeted drug for solid carcinoma”
- “An epoch-making drug in the treatment of lung cancer”
- “A wonder and dreamlike medicine”

### (3) Conflicts of interest among 10 expert members of the IRESSA guidelines committee

No.	Name	Defense witness	Member of WJOG**	Investigator of Clinical Trials of IRESSA
1	N. Saijo	☑		☑
2	M. Fukuoka	☑	☑	☑
3	S. Negoro		☑	☑
4	S. Kudo	☑		☑
5	T. Tamura			☑
6	H. Tada		☑	☑
7	T. Mitsudomi	☑	☑	☑
8	H. Kato		☑	☑
9	N. Yamamoto		☑	☑
10	K. Hayakawa		☑	☑

\*\* West Japan Oncology group (Twenty million yen per year was donated to the WJOG from AstraZeneca. The total amount of the donation reaches about 100 million yen.

## Discussions

- Ambiguous legal definition of advertisement for pharmaceuticals
- Lack of authorised appropriate medical information for patients.
- A hotbed of drug-induced disasters
  - Insufficient transparency of MHLW advisory committee and guidelines committee, etc.
  - “Corrupted relationship” between pharmaceutical industries and the government.
  - Economic ties between leading medical experts or patient support organization and drug companies

## Conclusions

- Promotional advertising and DTCA
  - Promote the distribution of authorised appropriate drug information to protect the public from misleading information provided as DTCA.
  - Review the definition of the advertisement to regulate advertisement masquerading as the scientific information.
  - Research the potential impact of the marketing strategy upon the activities of self-help patient group, and reveal the problems relating to the economic ties between patient support organization and drug companies.
- Inadequate warning statements
  - Set up the committee including patient representatives to check the contents of package inserts. The committee should be held ahead of the approval of drugs, being opened to the public.
- Conflicts of interest among experts
  - Promote the education of the medical students about issues concerning the relationship between physicians and commercial enterprises.