Managing uncertainty & benefit / risk over the life cycle of a medicine

A CALL FOR ADAPTABILITY & FLEXIBILITY IN PHARMACEUTICALS REGULATION FROM A PATIENT AND INDUSTRY VIEW

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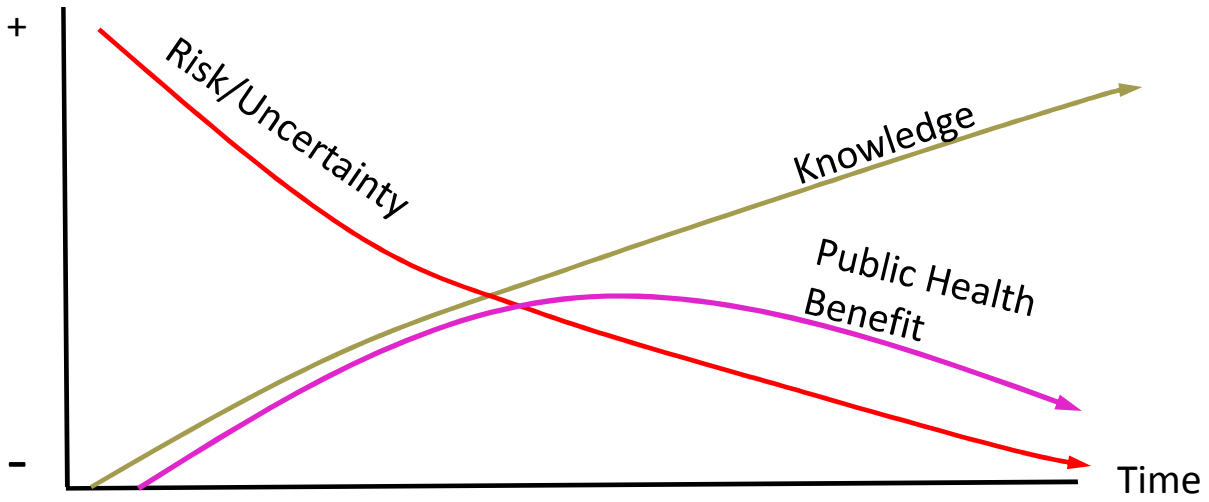
OECD – Improving Risk Regulation – Paris – 13-14 Oct 2014

The acceptance of uncertainty and risk may be quite different….

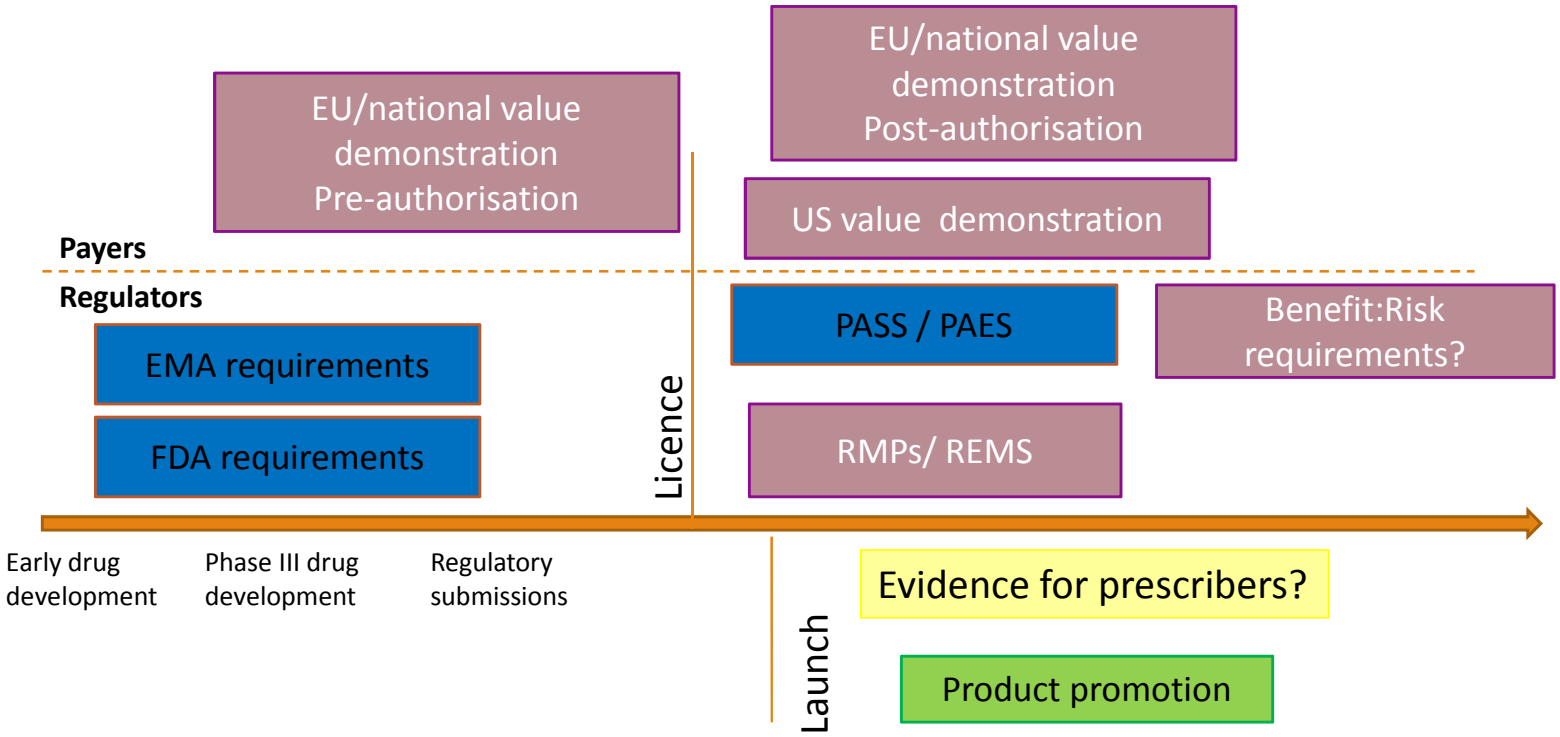
- A mother who gets her healthy child vaccinated
- A patient who suffers from asthma and who lives a normal life
- A patient who suffers from thyroid cancer
- A patient who has a bolus obstructing his / her airway

What is an acceptable level of uncertainty and benefit / risk in context of the medical need and public health benefit?

One size does not fit all – adaptive approaches are needed

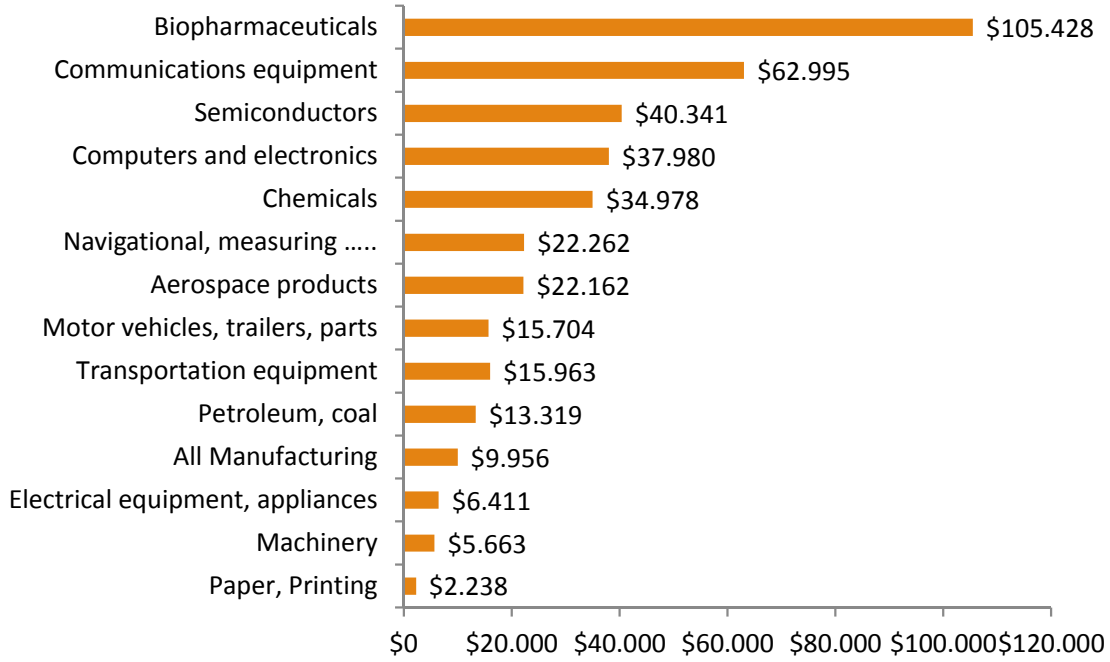


How much data do we need to offer a medicine to patients? How do we assess benefit / risk?



EMA: European Medicines Agency -- FDA: Food and Drug Administration -- RMP: Risk Management Plan -- REMS: Risk Evaluation and Mitigation Strategies

R&D Expenditure per employee 2000-2007 Industry comparison



Adapted from: www.manhattan-institute.org : Project FDA Report # 5 – March 2012

The Patients‘ view on the regulatory process

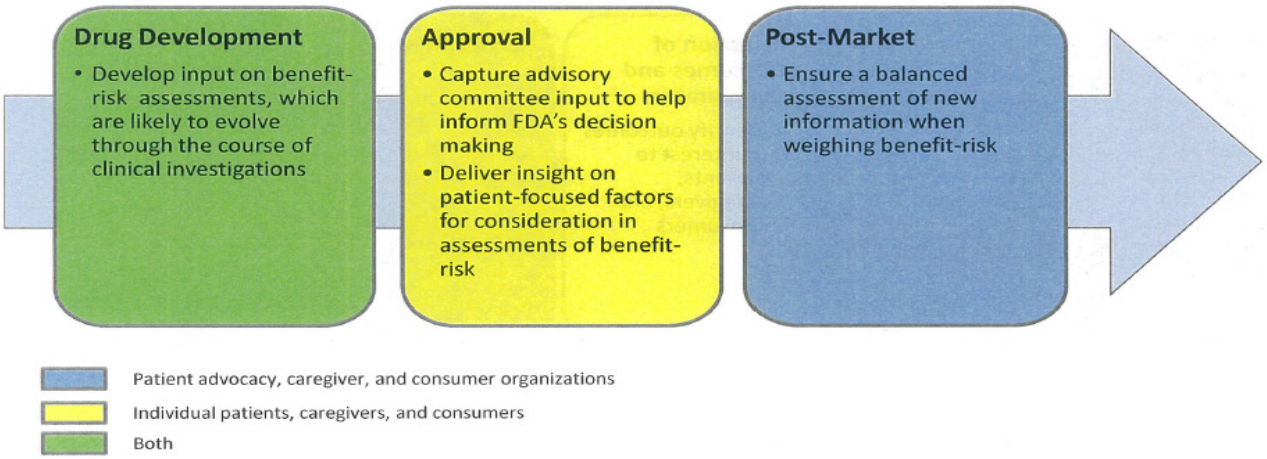
Table 7: Participant Perceptions about Regulatory Processes

Current Perceptions	A ‘Fit for Purpose’ Regulatory System
Protects the public	Protects vulnerable patients
Too slow and bureaucratic	Quick and flexible
Set in its ways	Accountable
Rare disease patients are excluded and isolated	Considers rare diseases differently
Not transparent enough	Transparent
Paternalistic	Patients’ views are represented
	Patients are given information, support and choice

Source: Genetic Alliance UK: New Medicines for Serious Conditions: How Patients would weight the risks and benefits – April 2014

A joint effort is needed to advance Adaptive regulation is one key part

The Patients‘ view – Engagement in Regulatory decision making

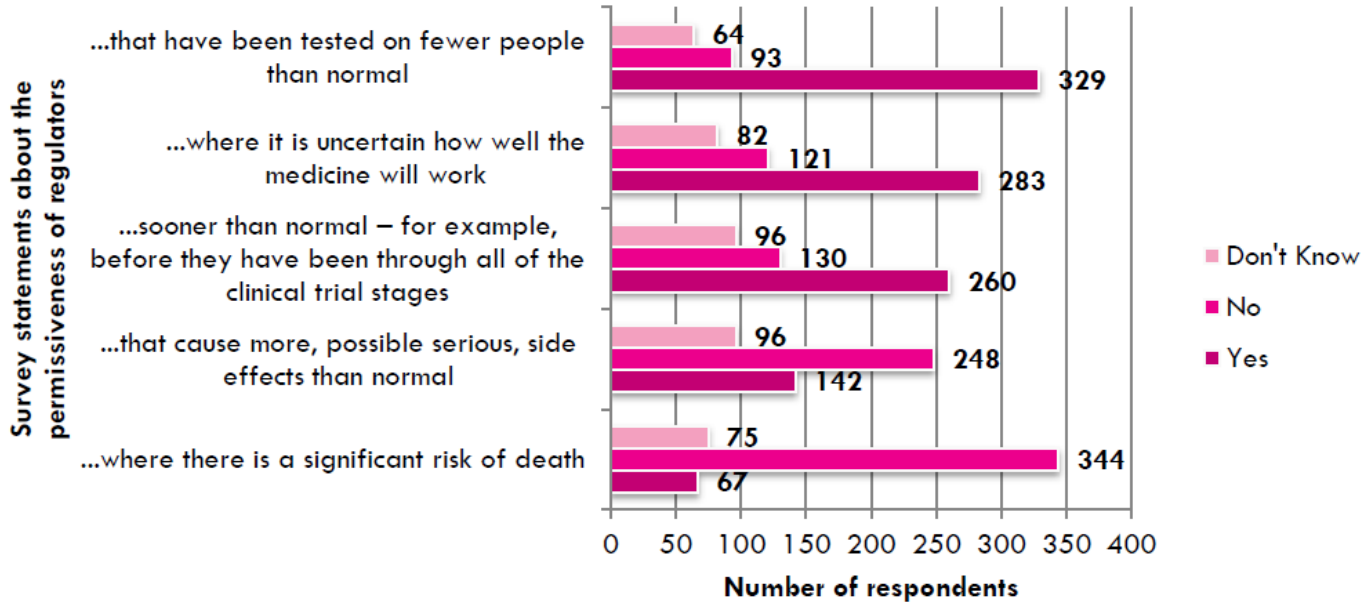


NATIONAL HEALTH COUNCIL

Sourced with permission from National Health Council, www.nationalhealthcouncil.org

The Patients‘ view on access to medicines

Figure 15: Circumstances in which Patients Should Be Allowed Access to Medicines (if they want)



Source: Genetic Alliance UK: New Medicines for Serious Conditions: How Patients would weight the risks and benefits – April 2014

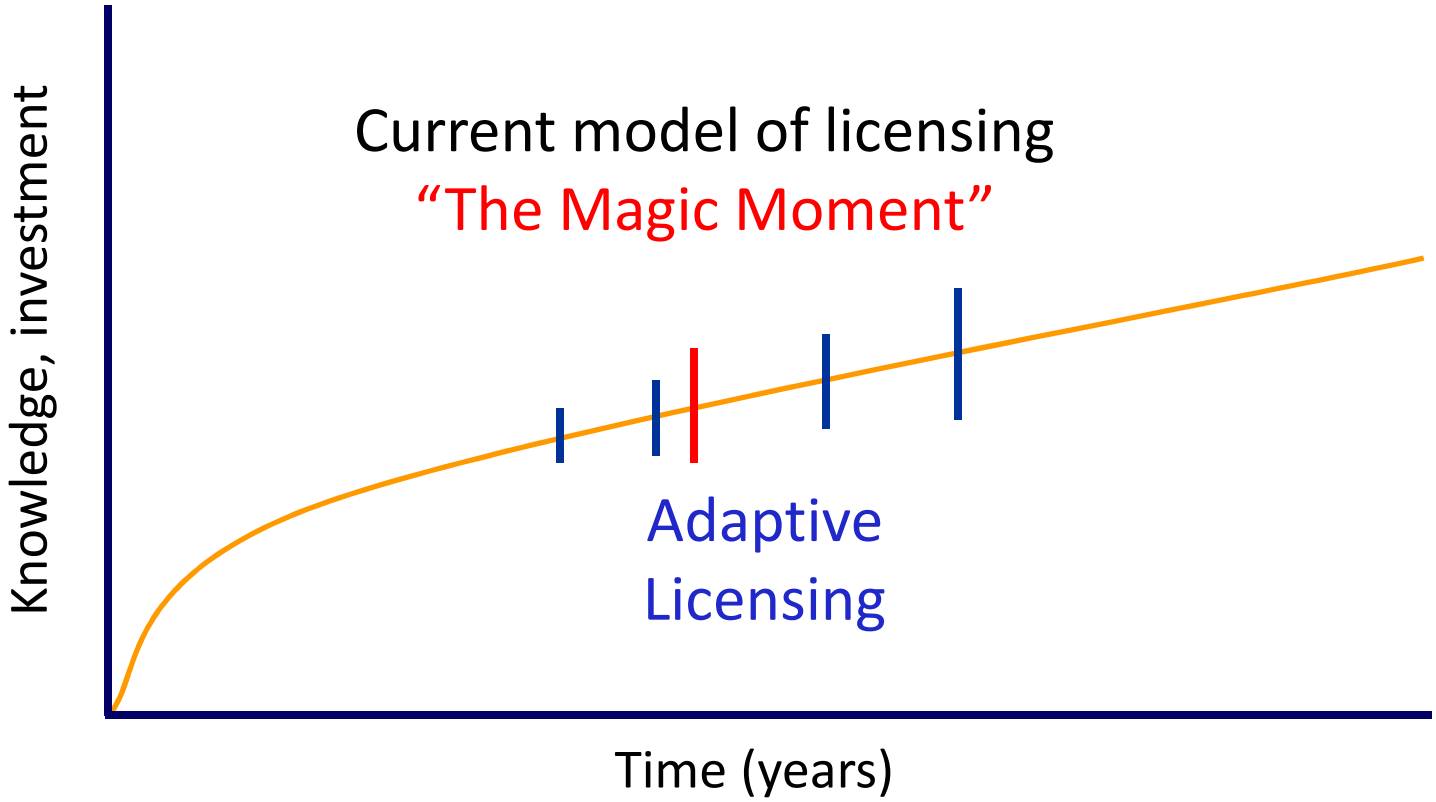
The Patients‘ view on decision making

Table 12: Survey Respondents Views on Patient Involvement

Q12-15 How much do you think patients should be involved in...	Setting the research agenda	Designing clinical trials	Marketing authorisation decisions	Post-marketing authorisation decisions
	%	%	%	%
Patient decides	10.1	7.8	10.1	10.3
Joint decision making	57.8	48.8	48.6	55.1
Involvement	18.9	27.2	23.0	19.8
Consult before deciding	13.2	16.3	18.3	14.8
Total	**100**	**100**	**100**	**100**

Source: Genetic Alliance UK: New Medicines for Serious Conditions: How Patients would weight the risks and benefits – April 2014

Traditional vs. adaptive licensing



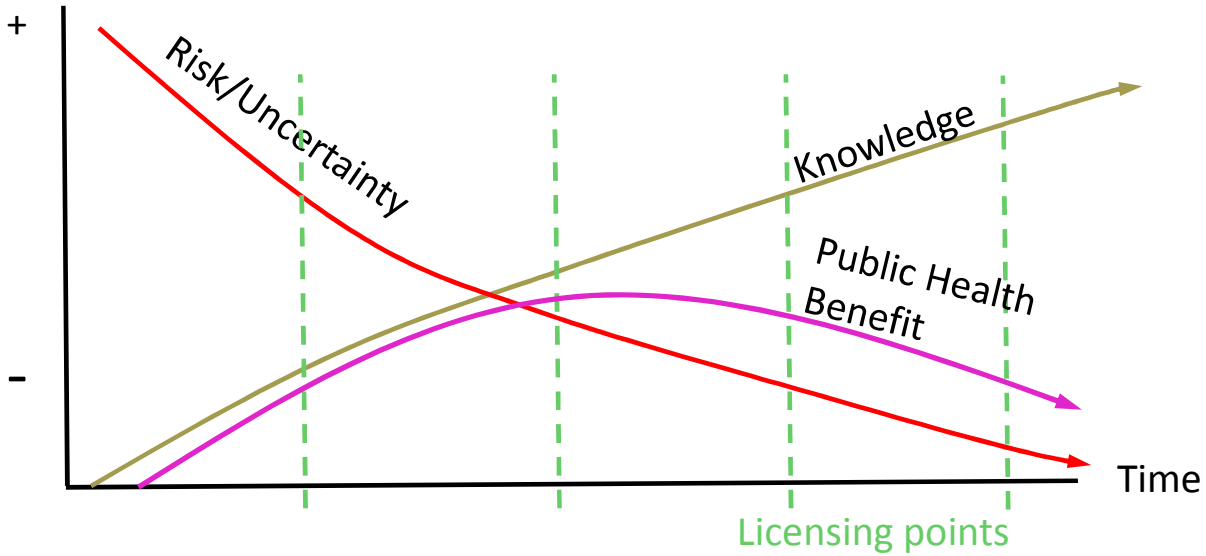
Adaptive Licensing - What is it?

- AL is a prospectively planned, adaptive approach to regulation of drugs.
- Through iterative phases of evidence gathering followed by regulatory evaluation and license adaptation, AL seeks to balance timely access for patients with the need to provide adequate evolving information on benefits and harms.
- AL builds on existing regulatory processes, including Conditional Authorization and RMPs
- To achieve the full potential of AL for public health and drug development, licensing decisions should be aligned with coverage and prescribers' decisions.
- AL is not about 'cutting corners', etc..!!

Modified from: G Eichler et al., Adaptive Licensing: Taking the Next Step in the Evolution of Drug Approval, Clinical Pharmacology & Therapeutics (2011); 91 3

Adaptive Licensing – Principles

prospective management & reduction of uncertainty
continuous assessment of benefit / risk



- Drug evaluation as a continuum
- Stakeholders need to agree on acceptable level of risk/uncertainty

EMA - Adaptive Licensing Milestones

March 2012:
Multi-Stakeholder Thought Leadership

STATE OF THE ART

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See COMMENTARY page 378

Adaptive Licensing: Taking the Next Step in the Evolution of Drug Approval

H-G Eichler[1,2], K Oye[2,3,4], LG Baird[2], E Abadie[5], J Brown[6], CL Drum[2], J Ferguson[7], S Garner[8,9], P Honig[10], M Hukkelhoven[11], JCW Lim[12], R Lim[13], MM Lumpkin[14], G Neil[15], B O'Rourke[16], E Pezalla[17], D Shoda[18], V Seyfert-Margolis[14], EV Sigal[19], J Sobotka[20], D Tan[12], TF Unger[18] and G Hirsch[2]

Traditional drug licensing approaches are based on binary decisions. At the moment of licensing, an experimental therapy is presumptively transformed into a fully vetted, safe, efficacious therapy. By contrast, adaptive licensing (AL) approaches are based on stepwise learning under conditions of acknowledged uncertainty, with iterative phases of data gathering and regulatory evaluation. This approach allows approval to align more closely with patient needs for timely access to new technologies and for data to inform medical decisions. The concept of AL embraces a range of perspectives. Some see AL as an evolutionary step, extending elements that are now in place. Others envision a transformative framework that may require legislative action before implementation. This article summarizes recent AL proposals; discusses how proposals might be translated into practice, with illustrations in different therapeutic areas; and identifies unresolved issues to inform decisions on the design and implementation of AL.

Clinical Pharmacology & Therapeutics (2012);
91 3, 426–437. doi:10.1038/clpt.2011.345

March 2014:
EMA Pilot Program

Home ▸ News and Events ▸ News and press release archive

European Medicines Agency launches adaptive licensing pilot project

Press release

19/03/2014

European Medicines Agency launches adaptive licensing pilot project

Improving timely access for patients to new medicines: pilot explores adaptive licensing approach with real medicines in development

The European Medicines Agency (EMA) is inviting companies to participate in its adaptive licensing pilot project. Companies who are interested in participating in the pilot are requested to submit ongoing medicine development programmes for consideration as prospective pilot cases.

A framework to guide discussions of individual pilot studies has been published.

The adaptive licensing approach, sometimes called staggered approval or progressive licensing, is part of the Agency's efforts to improve timely access for patients to new medicines. It is a prospectively planned process, starting with the early authorisation of a medicine in a restricted patient population, followed by iterative phases of evidence gathering and adaptations of the marketing authorisation to expand access to the medicine to broader patient populations.

M4P Medicines 4 Patients

Adaptive regulation is one key enabler to serve our patients and society in the future - A joint effort is needed to advance

Thank you!

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