EXPLANATORY MEMORANDUM TO

THE MEDICINES FOR HUMAN USE (PROHIBITION) (SENECIO AND MISCELLANEOUS AMENDMENTS) ORDER 2008

2008 No. 548

1. This explanatory memorandum has been prepared by the Medicines and Healthcare products Regulatory Agency, on behalf of the Department of Health, and is laid before Parliament by Command of Her Majesty.

2. Description

2.1. This Order prohibits the sale, supply and importation of unlicensed medicinal products for internal use containing *Senecio* species under section 62 of the Medicines Act 1968. The Order also makes minor amendments to three existing prohibition Orders made under section 62 of the Act in order to align the provisions in those Orders[1] exempting medicinal products containing Senecio species where they are imported into the United Kingdom and are destined for another EEA State or a third country; and in order to ensure that the exemption applies to goods coming from Bulgaria and Romania following their accession to the European Union on 1 January 2007 by importing into those Orders the definition of "EEA State" inserted into Schedule 1 of the Interpretation Act 1978 by section 26(1) of the Legislative and Regulatory Reform Act 2006[2].

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1. None

4. Legislative Background

4.1. Section 62 of the Medicines Act 1968 gives Ministers the power to prohibit the sale, supply or importation of medicinal products of specified description "where it appears to them to be necessary to do so in the interests of safety". This Order is being made to prohibit medicinal products containing Senecio species.

5. Extent

5.1. This Order applies to all of the United Kingdom.

6. European Convention on Human Rights

6.1. As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

7. Policy background

7.1. In March 2002, the Medicines and Healthcare products Regulatory Agency (MHRA) became aware of the supply of an unlicensed Chinese medicine, Qian Bai Biyan Pian, which traditionally contains the toxic plant *Senecio scandens.*

[1] Article 3(c) of the Medicines for Human Use (Kava-kava) (Prohibition) Order 2002 (S.I.2002/3170); Article 4(4) of the Medicines (Aristolochia and Mu Tong etc) (Prohibition) Order 2001 (S.I.2001/1841); Article 2(4) of the Medicines (Bal Jivan Chamcho Prohibition) (No.2) Order 1977 (S.I.1977/670).

[2] The definition of "EEA State" in Schedule 1 to the Interpretation Act 1978 came into force on 8 January 2007.

7.2. *Senecio* scandens is a member of the *Senecio* plant genus. Plant species within this genus are known to contain unsaturated pyrrolizidine alkaloids (PAs), which give rise to serious liver damage in humans. Unsaturated pyrrolizine alkaloids are known to cause serious hepatoxicity resulting in veno-occlusive disease of the liver in man and can ultimately lead to the need for a liver transplant and/or death. They have also been shown to be carcinogenic, mutagenic and genotoxic in animals.

7.3. In response to the risk to public health, the MHRA wrote to all herbal interest groups in March 2002 highlighting the toxicity of this plant genus and requesting a voluntary withdrawal of all unlicensed medicines which may contain *Senecio* species. The Agency specifically asked to be made aware of any herbal interest groups that disagreed with its initial safety assessment or proposed not to advise its members to remove any relevant products from sale. No such representations were received, although a number of replies indicated support for the action taken.

7.4. Despite the voluntary withdrawal, the Agency continued for some time to receive sporadic reports from members of the public indicating that products containing *Senecio scandens* were continuing to be sold in the UK in traditional Chinese medicine (TCM) outlets.

7.5. Following a public consultation in January 2004 the MHRA sought advice on the issue from two independent committees of experts – the Committee on Safety of Medicines (CSM) and the Medicines Commission (MC). The CSM and MC found evidence of harm associated with products containing unsaturated pyrrolizidine alkaloids (PAs), and advised the prohibition of all *Senecio* species in unlicensed medicines for internal use to protect public health. (It should be noted that the CSM and MC were abolished from 30 October 2005, but transitional provision was made by the Medicines (Advisory Bodies) (No.2) Regulations 2005 and the Medicines (Advisory Bodies) (Transitional Provisions) Regulations 2006 in relation to their advice.)

7.6. The proposals for a prohibition order were not immediately progressed due to the priority given to other wider legislative measures to protect public health. By this stage the CSM and MC were no longer in existence. The MHRA consulted the new Herbal Medicines Advisory Committee (HMAC) in November 2006. Their advice was consistent with that of the CSM and MC and they agreed that supply of *Senecio* species remained a risk to public health. Due to the length of time that had elapsed since the last public consultation in 2004 the MHRA consulted again on proposals to prohibit *Senecio* species in unlicensed medicines. In July 2007, after considering the responses to the further period of consultation and reviewing all previous advice HMAC advised that the MHRA proceed with the prohibition of all *Senecio* species in unlicensed medicines for internal use to protect public health.

7.7. The Order will provide a legislative basis to prohibit the sale, supply, and importation of unlicensed medicinal products for internal use which contain *Senecio* species. The draft Order was the subject of public consultations in January 2004 and 2007.

7.8. No guidance has been issued.

8. Impact

8.1. The proposed prohibition itself is likely to have little or no impact on companies adhering to the voluntary withdrawal requested in 2002. It is likely that companies in many parts of the herbal sector do not use and never have used products containing *Senecio* scandens as most practitioners accept the evidence that *Senecio* is toxic. Further details are available in the Impact Assessment (IA) which is attached to this memorandum.

8.2. There is no impact on the public sector.

9. Contact

9.1. Judith Thompson at the Medicines and Healthcare products Regulatory Agency (Tel: 020 7084 2945; or e mail: Judith.m.thompson@mhra.gsi.gov.uk) can answer queries regarding the instrument.

Summary: Intervention & Options

Department /Agency:	Title:	
MHRA	Impact Assessment of The Medicines for Human Use (Prohibition) (Senecio and Miscellaneous Amendments) Order 2008	
Stage: Final	**Version:** 1	**Date:** 27/02/08
Related Publications: Proposals to prohibit the sale, supply or importation of unlicensed medicinal products for internal use containing Senecio species		

Available to view or download at:

http://www.mhra.gov.uk/Publications/Consultations

Contact for enquiries: Judith Thompson **Telephone:** 020 7084 2945

What is the problem under consideration? Why is government intervention necessary?

In March 2002, the Medicines and Healthcare products Regulatory Agency (MHRA) became aware of the supply of an unlicensed Chinese medicine, Qian Bai Biyan Pian, which traditionally contains the toxic plant Senecio scandens. The Senecio plant genus are known to contain unsaturated pyrrolizidine alkaloids (PAs), which are known to cause serious hepatoxicity resulting in veno-occlusive disease of the liver in man and can ultimately lead to the need for a liver transplant and/or death. Action is needed to ensure that this product is not made available in the UK.

What are the policy objectives and the intended effects?

To protect the public from a serious risk of liver damage from consumption of unlicensed medicines containing Senecio species.

What policy options have been considered? Please justify any preferred option.

Six options were initially considered, these are outlined in more detail below. In light of the current assessment of the Herbal Medicines Advisory Committee that the only realistic route to achieving the desired level of public health protection is through the option of a statutory prohibition, option 6 to prohibit all Senecio species in unlicensed medicines, except those for external use, is the preferred option.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

In this case it would not be appropriate to conduct a formal review. However the Agency will continue to monitor ADRs and take any evidence to support safe use of Senecio into account.

Ministerial Sign-off For final proposal/implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

Dawn Primarolo .....Date: ***28th February 2008***

Summary: Analysis & Evidence

Policy Option: 6	Description: **Prohibit all Senecio species in unlicensed medicines, except those for external use.**

COSTS

ANNUAL COSTS	
One-off (Transition) **Yrs**	Description and scale of **key monetised costs** by 'main affected groups' likely to have little or no impact on companies adhering to the exsisting voluntary agreement. Proposals will impact rogue traders but again impact will be minimal.
£	
Average Annual Cost (excluding one-off)	
£	**Total Cost** (PV) **£**

Other **key non-monetised costs** by 'main affected groups' - Groups affected; Importers supplying herbal material to manufacturers or herbalists; Manufacturers and importers of senecio products; Wholesalers and retailers of products containing senecio; Herbalists making and preparing herbal medicines to meet an individual patient's specific needs. Other Costs £0 -

BENEFITS

ANNUAL BENEFITS	
One-off **Yrs**	Description and scale of **key monetised benefits** by 'main affected groups' benefit to public health, providing protection against unlicensed herbal remedies containing Senecio; to NHS, reduced costs from hospitalisation, treatment for liver damage/ transplantations. Undetermined use of senecio prevent full costing but known cost of 24 hr emergency care in order of £1800.
£	
Average Annual Benefit (excluding one-off)	
£	**Total Benefit** (PV) **£**

Other **key non-monetised benefits** by 'main affected groups' none applicable

Key Assumptions/Sensitivities/Risks As companies not required to notify the MHRA of products placed on the UK market the numbers and the level of use of these products not known. Risk to the population undeterminable. Supply potentially wider than indicated by the reports received to date. Growing use of herbals and lack of public awareness increases risk

Price Base Year	Time Period Years	**Net Benefit Range** (NPV) **£**	**NET BENEFIT** (NPV Best estimate) **£**

What is the geographic coverage of the policy/option?			UK	
On what date will the policy be implemented?			1 April 2008	
Which organisation(s) will enforce the policy?			MHRA	
What is the total annual cost of enforcement for these organisations?			£	
Does enforcement comply with Hampton principles?			Yes	
Will implementation go beyond minimum EU requirements?			No	
What is the value of the proposed offsetting measure per year?			£	
What is the value of changes in greenhouse gas emissions?			£	
Will the proposal have a significant impact on competition?			No	
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	No	No	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices) (Increase - Decrease)

Increase of £ 0 Decrease of £ 0 **Net Impact** **£** 0

Key: **Annual costs and benefits: Constant Prices** **(Net) Present Value**

Evidence Base (for summary sheets)

In March 2002, the Medicines and Healthcare products Regulatory Agency (MHRA) became aware of the supply of an unlicensed Chinese medicine, Qian Bai Biyan Pian, which traditionally contains the toxic plant *Senecio scandens.*

Senecio scandens is a member of the *Senecio* plant genus. Plant species within this genus are known to contain unsaturated pyrrolizidine alkaloids (PAs), which give rise to serious liver damage in humans. Unsaturated pyrrolizine alkaloids are known to cause serious hepatoxicity resulting in veno-occlusive disease of the liver in man and can ultimately lead to the need for a liver transplant and/or death. They have also been shown to be carcinogenic, mutagenic and genotoxic in animals.

In response to the risk to public health, the MHRA wrote to all herbal interest groups on 26 March 2002 highlighting the toxicity of this plant genus and requesting a voluntary withdrawal of all unlicensed medicines which may contain *Senecio* species. The Agency specifically asked to be made aware of any herbal interest groups that disagreed with its initial safety assessment or proposed not to advise its members to remove any relevant products from sale. No such representations were received, although a number of replies indicated support for the action taken.

Despite the voluntary withdrawal, the Agency continued for some time to receive spasmodic reports from members of the public indicating that products containing *Senecio scandens* were continuing to be sold in the UK in traditional Chinese medicine (TCM) outlets. To date there have been ten reports of supply of products containing *senecio,* the latest being in January 2005. The reports have not been restricted to a single outlet or geographical region.

The MHRA sought advice on the issue from three independent committees of experts – the former Committee on Safety of Medicines (CSM), the former Medicines Commission (MC) and the Herbal Medicines Advisory Committee (HMAC) – the latter of which advises the MHRA on the safety of herbal medicines. The CSM, MC and HMAC found evidence of harm associated with products containing unsaturated pyrrolizidine alkaloids (PAs), and advised the prohibition of all *Senecio* species in unlicensed medicines for internal use to protect public health.

Risk assessment

The toxicity of unsaturated PAs, which are found in *Senecio* species, is well documented. Further information on the toxicity of PAs can be found at Appendix A. Consequently, the use of *Senecio jacobaea L* in unlicensed herbal medicines for internal use was restricted to supply in premises which are registered pharmacies, and by or under the supervision of a pharmacist, by the Medicines (Retail Sale or Supply of Herbal Remedies) Order 1977 (SI 1977/2130). The Order, which does not restrict supply of any other *Senecio* species, reflects the knowledge of use of *Senecio* at that time and does not necessarily imply that the use of other *Senecio* species was considered acceptable on public health grounds at the time.

Due to the risks associated with this plant genus, the European Union's Committee on Proprietary Medicinal Products (CPMP) included all *Senecio* species within a list compiled in 1992 of "herbal drugs with serious risks" stating the reason for inclusion as "contains pyrrolizidine alkaloids with genotoxic, carcinogenic and hepatoxic properties".

To date, there have been no formal reports, through the MHRA's Yellow Card reporting scheme, of adverse reactions in the UK associated with the use of *Senecio.* This is not necessarily indicative of a lack of risk to public health but may reflect the following factors:

- possibly a limited usage of products containing *Senecio* species by the UK population
- consumers may incorrectly assume that herbal medicines are safe and do not cause adverse reactions because they are based on natural ingredients
- research shows that patients who consult health professions about a health problem often do not tell the health professional that they have been taking a herbal remedy.

Under the current regulatory regime for unlicensed herbal medicinal products, companies do not notify the MHRA of such products they place on the UK market. The number of products in the UK and the level of use by the population are therefore not known. The level of risk to the population can therefore not be determined. Nine of the individuals reporting the supply of Qian Bai Biyan Pian were alerted to the possible inclusion of *Senecio* within the formulation by the MHRA's Herbal Safety News WebPages, an Agency publication intended to inform potential users of current safety concerns with herbal remedies. It is possible that other members of the public are not as well informed and that supply is wider than indicated by the reports received to date.

The MHRA's assessment is that anyone consuming a product containing *Senecio* species is at risk of irreversible liver damage resulting in the need for transplantation and/or ultimately death and that there is a need to prevent the supply of all relevant products to the public.

Consultation

The MHRA wrote to stakeholders in March 2002 to ask for a voluntary withdrawal of *Senecio* and again in October 2003, after further reports of supply, to remind stakeholders of the position. Stakeholders were asked to let the Agency know if they disagreed with this course of action and nothing was forthcoming. The issue has also been discussed with the Herbal Forum.

The proposal to prohibit *Senecio* species in unlicensed remedies for internal use has been discussed with the Herbal Forum, which represents all UK manufacturers' Trade Associations. The Better Regulation teams within the Department of Health and the Cabinet Office; the Small Business Service and the Office of Fair Trading have all been consulted.

MHRA held two consultations with stakeholders. The first official consultation was held in January 2004. The only dissenting opinion was from the Chinese Government. A second informal consultation took place in 2007. A total of eight responses were received; five supported the option to prohibit the sale and supply of *Senecio*; two supported limiting sale and supply of *Senecio* to Pharmacy only and one supported postponing any decision until further scientific evidence became available. However, the MHRA and HMAC noted the comments made but with the absence of detailed scientific information, the MHRA felt that there was not sufficient evidence to demonstrate that S*enecio* could be used safely. It would remain open for an applicant for a marketing authorisation or a registration under the Traditional Herbal Medicines Registration Scheme to demonstrate the safety of a particular product containing *Senecio* species.

Options

1. Six options were considered for unlicensed remedies containing *Senecio* for internal use. In principle, it would have been possible to combine several options. The following points were considered in relation to the options set out below:

    - all *Senecio* species contain hepatoxic pyrrolizidine alkaloids. There is no scientific basis for any of the options considered below to be limited to certain species of *Senecio* or particular parts of plants. Whilst no evidence was forthcoming during consultation which demonstrated certain *Senecio* species to be safe, the absence of systematic quality controls within some parts of the sector would not guarantee that the public could be assured that toxic *Senecio* species may not be confused with the intended safe species.

    - on the existing data, it is not possible to determine a dosage threshold below which *Senecio* does not pose a risk to human health and there is therefore no evidence base for any of the options to be restricted to certain preparation strengths or dosages. No further evidence which demonstrates the safety of certain posologies was forthcoming. Therefore, any possible action would need to be applied equally to all preparation strengths and dosages.

    - the consultation provided an opportunity to identify any evidence that would allow distinctions or restrictions to be made. However, even if it was possible to identify certain parameters that would allow certain usage without causing a risk to public health, there would be an issue as to whether quality controls in parts of the sector would be adequate to ensure that remedies met those parameters.

Option 1: Take no further action at this time.

Option 2: Continue the voluntary agreement to prevent sale, supply and importation.

Option 3, (a) and (b): Continued availability with warning information about the risks of serious liver damage made available with the product:

- voluntary warnings could be added with the agreement of manufacturers of unlicensed products, or
- warnings could be introduced as a legal requirement.

Option 4: Extend existing statutory restrictions on *Senecio* species to all *Senecio* species, restricting supply for internal use through premises which are registered pharmacies and by or under the supervision of a pharmacist.

Option 5: Make all *Senecio* species Prescription Only Medicines (POMs), limiting supply through a prescription from a doctor or dentist.

Option 6: Prohibit all *Senecio* species in unlicensed medicines, except those for external use.

Quantifying and valuing the options

Option 1 (take no action)

This option, which implies letting the voluntary agreement lapse, would not provide any public health protection. The reports of supply of Qian Bai Biyan Pian indicate possible consumption of *Senecio* by some members of the public. This is despite two letters from the MHRA to interest groups warning of the dangers of *Senecio* and stating that *Senecio* should not be supplied for internal use. If reports of supply of Qian Bai Biyan Pian could be regarded as isolated incidents it could be argued that it would be sufficient to take no action other than advising the outlets that had been identified. However, given the evidence of supply and the fact that *Senecio* has recognised uses in some traditional medicines, this option appears clearly insufficient to address the public health risk. Under this option, there would be no direct cost to business but any reports of adverse reactions associated with the presence of *Senecio* in unlicensed medicines could damage sales of herbal medicines and the credibility of the sector.

Option 2 (Continued voluntary agreement to prevent supply)

Experience of supply of Qian Bai Biyan Pian suggests that the voluntary agreement with trade and practitioner associations may not be fully effective. Moreover, many operators do not belong to an association and are more likely to be unaware of the voluntary agreement and the health risks posed by *Senecio* species. In order to reach as wide an audience as possible, including those operators who are not members of a Trade Association, the risks associated with *Senecio* and the action requested by the Agency have been included in the MHRA's Webpages 'Herbal Safety News' on www.mhra.gov.uk However, two of the reports of supply of *Senecio* were associated with shops which are members of a Trade Association.

There would be no future effective protection if any individual supplier disagreed with the MHRA's safety assessment.

Option 3, (a) (continued availability with voluntary safety warnings)

Warnings could be introduced which explain the risk of serious liver damage posed by *Senecio* species contained within the products, through a voluntary agreement with the sector. There would be no sanctions or means of enforcement. It is unclear whether there would be full compliance with voluntary arrangements. Regardless of the level of co-operation achieved, it is considered that this measure would not introduce the necessary level of public health protection. As there is currently no scientific

evidence which supports the safe usage of *Senecio*, these warnings would only alert consumers to a risk and would not provide any information on how that risk could be avoided.

Option 3, (b) (continued availability with mandatory safety warnings)

Products could be required to carry safety warnings, which may include a statement to the effect that *Senecio* species contained within a product are known to cause serious liver damage, as a *legal requirement.* This requirement, if breached, would carry sanctions. This could be done by means of regulations made under section 85 of the Medicines Act 1968.

The introduction by legislation of label warnings for individual unlicensed remedies would have major drawbacks as a practical way of regulating these products. Overall there are very large numbers of different unlicensed herbal remedies on the UK market, especially when taking into account all the numerous combinations of different ingredients as well as different product strengths and dosage forms. In relation to each of these different products it would be appropriate on public health grounds for manufacturers of remedies to include a range of product specific information about its safe usage, including any appropriate warnings. Although technically feasible, at least in principle, it appears inherently undesirable to the MHRA to go down the route of attempting to set out in legislation what is an appropriate warning information for each remedy.

On balance, a voluntary agreement is less likely to capture the co-operation of all suppliers, such as those who are not members of Trade Associations with a robust code of conduct. All suppliers would have to comply with any requirement for mandatory safety warnings, regardless of their links with Trade Associations. However, the MHRA's assessment is that anyone consuming unlicensed medicines containing *Senecio* species is at risk of serious liver damage and that there is a need to prevent relevant products being supplied. A warning alone would not help prevent consumers from suffering liver damage and could not be tailored to fit the different species of *Senecio* or types of products available.

In addition there is no evidence of efficacy to balance the extensive evidence that *Senecio* can cause serious harm. The Agency's view is that warning information, whether achieved by compulsory or voluntary means, would therefore be inappropriate and insufficient to address the public health risk.

Options 4 and 5 (make Senecio species Pharmacy Only (P) or a POM)

The MHRA considers *anyone* consuming *Senecio* species to be at risk regardless of the individual's medical history, the dosage, strength or type of preparation or length of treatment.

Given the toxicity of *Senecio*, it would not be possible for an unlicensed herbal medicine containing it to be used safely even if used under the supervision of a pharmacist (as a P) or a registered doctor (as a POM).

***Option 6* (prohibit all *Senecio* species in unlicensed medicines for internal use)**

The MHRA recognises that a continuing voluntary agreement could achieve a significant proportion of the desired level of protection. However, the MHRA attaches weight to the current assessment of the HMAC that the only realistic route to achieving the desired level of public health protection is through the option of a statutory prohibition. This is on the basis of the risk to health from consumption of products containing *Senecio,* the fact that *Senecio* has a reported place in some traditional medicines, that there has been some evidence of supply in the UK, and that not all practitioners and clinics are members of a recognised practitioner or trade association.

Costs and Benefits

Compliance costs for business

<u>Business sector affected</u>

The following will have an interest:

- Importers supplying herbal material to manufacturers or herbalists.

- Manufacturers and importers of products containing *senecio.*

- Wholesalers and retailers of products containing *senecio.*

- Herbalists making and preparing herbal medicines to meet an individual patient's specific needs.

Recurring costs, Non recurring costs and Total Compliance Costs

The proposed prohibition itself is likely to have no or little impact on companies adhering to the voluntary withdrawal requested last year. It is likely that companies and practitioners in most parts of the herbal sector do not use and never have used products containing *Senecio* products as most practitioners accept the evidence that *Senecio* is toxic.

The financial impact for other individual companies will depend upon the amount of herbal remedies containing *Senecio* which are supplied and how this relates to the overall sales of a business. All the reports to date relate to the supply of one formulation from traditional Chinese medicine (TCM) outlets for the treatment of sinusitis (chronic and acute symptoms of inflamed sinuses). It is likely that a wide range of other products not affected by this proposal are also supplied by these outlets and, on this assumption, it is unlikely that the supply of Qian Bai Biyan Pian would constitute more than a small proportion of total sales for any individual companies affected. For example, Qian Bai Biyan Pian was only one of 122 different products supplied to consumers by one particular UK based TCM clinic through its internet site.

The impact is unlikely to be significant for most businesses, although smaller businesses supplying a limited range of products could be affected more significantly in the short term. In the longer term, any impact could be countered by an adjustment to the products supplied. Stakeholders were asked in the previous consultation to comment on the regulatory impact during consultation. No specific comments were received.

In the long term, the level of protection provided by the order may help maintain a growing herbal medicines market.

Benefits identified and quantified

The proposed legislation will benefit public health by introducing protection against unlicensed herbal remedies containing *Senecio*. Costs to the National Health Service, for example, due to hospitalisation, and required treatment for liver damage such as transplantations could be avoided. It is not possible to quantify the potential benefits since the current use of products containing *Senecio* is unknown and it is not realistic to try and estimate the possible future use. The Agency is aware of one estimate that the cost of a patient occupying an intensive care bed for 24 hours could be in the order of £1,800.

Sectors and Groups affected

A statutory prohibition would ensure that the same restrictions on sale and supply are applied to all businesses. This would not necessarily be the case with any arrangements which were voluntary.

There will be some impact on the Chinese community however, there are alternative TCM treatments for the treatment of sinus related problems and a statutory prohibition would still be the preferred option in the interests of public health.

A notification of a 'draft technical regulation' (under Directive 98/34/EC) in relation to the proposal was issued to the European Commission. This communicated the anticipated effects of the measure and gave other Member States and the Commission an opportunity to raise concerns about potential barriers to trade. No comments were received.

The evidence that *Senecio* is harmful relates only to internal use. In the interests of fairness and proportionality, unlicensed herbal remedies for external use which contain *Senecio* are not affected by the proposal.

Enforcement, sanctions, monitoring and review

The prohibition will be enforced by the MHRA's Enforcement Unit as part of its existing compliance and enforcement responsibilities in protecting public health at no additional cost to the Agency. Offenders will be liable to prosecution and unlicensed medicinal products for internal use which contain *Senecio* species will be included in the Agency's regular product monitoring programme.

Implementation and delivery plan

Senecio will be added to the list of herbal ingredients which are prohibited or restricted in medicines.

Post implementation review

In this case it would not be appropriate to conduct a formal review. However the Agency will continue to monitor ADRs and if, at a later date, evidence comes to light that *Senecio* can be treated in such a way that it can be safely used in unlicensed medicines this will be taken into account.

Summary and recommendations

Option 1: *(take no further action at this time)*

No public health protection would be provided. Given the toxicity of *Senecio* this would be inappropriate.

Option 2: *(continued voluntary agreement not to supply)*

A voluntary withdrawal has been in place since March 2002 and may be responsible for a falling off of reports of supply of products. However, in view of the facts that not all practitioners and clinics are members of practitioner or trade associations and that *Senecio* has a place in some traditional medicines this option only provides partial protection.

Option 3, a) and b): *(continued availability of Senecio with warning information)*

Warning labels, either on a voluntary or mandatory basis, would represent an insufficient response to the serious risk to public health.

Options 4 & 5: ***(make Senecio a P or POM)***

The toxicity of *Senecio* is such that restricting supply through a pharmacy and under the supervision of a pharmacist or via a prescription from a doctor or dentist would not protect patients.

Option 6: *(prohibit Senecio in unlicensed medicines)*

In view of the nature of the risk, this is the most appropriate option. This is considered necessary in the interests of safety. The option has been selected after public consultation and very careful consideration of the evidence by three independent expert scientific committees, the CSM, MC and HMAC.

In terms of proportionality in relation to public health, the action is consistent with previous action taken in relation to other licensed and unlicensed medicines where evidence of liver toxicity has emerged.

All prohibitions of this kind are subject to a review in the event that significant new evidence emerges.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	*Results in Evidence Base?*	*Results annexed?*
Competition Assessment	Yes	Yes
Small Firms Impact Test	Yes	Yes
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	No	No
Race Equality	Yes	Yes
Disability Equality	Yes	Yes
Gender Equality	Yes	Yes
Human Rights	No	No
Rural Proofing	No	No

Annexes

Equality Impact

Equality Impact assessments covered within earlier consultations, the impact of this policy on various population groups is considered to be minimal. While Senecio has a known usage in Traditional Chinese Medicine, its use in the UK is rare as most practitioners accept the evidence that Senecio is toxic.

Impact on small firms

Our understanding from discussions with the Herbal Forum, which represents all the manufacturers' Trade Associations, including those representing small businesses such as the Association of Small Growers and Suppliers, is that Senecio is not used by the manufacturers and suppliers represented by the Forum and as a result there would be little regulatory impact. It is clear however that Senecio has reached the market via a variety of other outlets.

See above for an assessment where other small businesses not represented by the Herbal Forum may supply Senecio containing products.

Competition assessment

The favoured option, option 6, is to prohibit use of species of Senecio in unlicensed medicinal products for internal use. Under this option businesses will be prevented from selling, supplying or importing unlicensed medicinal products intended for internal use that contain Senecio. This prohibition would not be expected to affect competition in the unlicensed herbal medicines sector. This conclusion is based on the likelihood that the majority of businesses involved in manufacturing, processing, distribution or sale of herbal medicines in the UK would be unlikely to derive their revenue to any significant extent, if at all, from products utilising this herb. Whilst this may restrict businesses product range, this restriction will be uniform across the sector.

Our initial view, based on the earlier consultation, is that in most cases unlicensed products containing Senecio would not make up a significant proportion of sales. However, even if previously some business made significant sales of Senecio, many of these businesses have already undertaken a voluntary withdrawal of such products. The prohibition will effectively eliminate the market for unlicensed products for internal use. However, it is not intended that its use will be prohibited in products intended for external use. Moreover, it is likely that substitute products exist for unlicensed Senecio medicine products which would suggest that the relevant market may be wider than that for just these products. Within such a wider market, the significance of any effects may be further reduced.