

**SUBMISSION TO THE MCC
FOR CONSIDERATION DURING
THE 43rd MEETING**

**RECLASSIFICATION OF
FLURBIPROFEN**

FROM:

Flurbiprofen	except in throat lozenges containing 10 milligrams or less per lozenge	Prescription
Flurbiprofen	in throat lozenges containing 10 milligrams or less per lozenge	Pharmacy Only

TO:

Flurbiprofen	except in preparations for topical oral use	Prescription
Flurbiprofen	in preparations for topical oral use: a. in divided preparations containing 10 mg or less of flurbiprofen per dosage unit, or b. in undivided preparations containing 0.25 % w/v per cent or less or 10 mg or less per dose of flurbiprofen.	General Sale

Date of Application Submission: 29
January 2010

Executive Summary

Acute sore throat is most often caused by a viral or bacterial infection^{1,2}. It is usually part of a simple illness such as the common cold and may be accompanied by sniffles, coughs, fever, swollen and sometimes tender glands in the neck. Most people (90%) are over their infection by one week, and half are better by about 3.5 days.

A recent consumer survey conducted by Reckitt Benckiser in the UK in December 2008³ amongst 1014 individuals who had experienced a sore throat in the last 3 months, showed that only 1% indicated that they would seek the advice of a pharmacist before treating the sore throat and another 1% said they would visit their doctor.³ This data demonstrates that sore throat can easily be recognised and treated without the intervention of a pharmacist or doctor. These findings may be extrapolated to apply to the majority of the New Zealand population who would be self-medicating for this complaint.

The Australian National Prescribing Service (NPS) Case Study 26⁴ showed that 78% of GPs who participated in a sore throat case study would have prescribed an antibiotic for their patients. Hence, it is important that treatments for sore throats are easily obtainable and effective and so that the consumer would not present in a doctor's surgery unnecessarily.

Currently, self-medication for sore throats includes oral preparations of analgesics, antibacterial throat lozenges and sprays with or without local anaesthetic. In a meta-analysis of available treatments other than antibiotics, by Thomas et al⁵, analgesics such as paracetamol (1000 mg dose), aspirin (in adults 800 mg dose) or ibuprofen (200-400 mg dose) seemed to be an effective treatment when used regularly.

¹ NPS Case study 26: Management of sore throat April 2003
http://www.nps.org.au/_data/assets/pdf_file/0012/35400/Case_26_results.pdf

² NPS "I've got a sore throat: Will an antibiotic make me better?" April 2002
http://www.nps.org.au/_data/assets/pdf_file/0019/72154/Sore_throat_and_role_of_antibiotics.pdf

³ Unpublished Reckitt Benckiser Project Switch 2, Consumer Survey, December 2008

⁴ http://www.nps.org.au/_data/assets/pdf_file/0005/16943/ppr18.pdf

⁵ Thomas M, Del Mar C, Glasziou P. How effective are treatments other than antibiotics for acute sore throat? Br J Gen Pract 2000; 50: 817-820

Flurbiprofen has been available worldwide in various formulations since 1977. It is a non-steroidal anti-inflammatory drug (NSAID) of the propionic acid group, the same group as ibuprofen and has a similar safety profile. It has analgesic, anti-inflammatory and anti-pyretic properties primarily through its ability to inhibit prostaglandin synthesis.

The oral therapeutic dose of flurbiprofen is 150 to 300 mg daily⁶. In comparison, the dose in the lozenge formulation is 8.75 mg. Flurbiprofen 8.75 mg lozenges have been shown to be effective in relieving the symptoms of sore throat, with onset of pain relief, reduction in throat soreness and reduction in throat swelling observed 30 minutes after sucking a lozenge. The duration of action is between 2-3 hours⁷. The recommended maximum daily dose is 8 lozenges i.e. a total daily dose of 70 mg which is less than a half of the minimal daily oral therapeutic dose. Since systemic adverse events with NSAIDs are known to be dose-related, the low dose of flurbiprofen lozenges is expected to be associated with minimal adverse effects.

Flurbiprofen 8.75 mg lozenges were first registered in New Zealand in 1999. In Australia, it was sold as a Prescription Medicine following registration in 2000. In February 2002, it was rescheduled to S3 (Pharmacist Only Medicine). In October 2002, it was further rescheduled to S2 or “Pharmacy Only Medicine”. This classification is also harmonised with NZ. Overall its use as a “Pharmacy Only Medicine” has been at least 7 years in Australia, NZ and the UK.

The current classification for flurbiprofen in throat lozenges containing 10 milligrams or less per lozenge is “Pharmacy Only”, while all other dosage forms of flurbiprofen are classified “Prescription Medicines”.

Reckitt Benckiser proposed the “Pharmacy Only Medicine” classification to be amended to a “General Sale” classification with the proposed wording:

⁶ Martindale 35th Edition, Flurbiprofen, page 52

⁷ Unpublished Study BH5009: Benrimoj SI *et al.* A randomized, double-blind, parallel group, placebo-controlled, investigation of the safety and efficacy of flurbiprofen lozenges (8.75 mg and 12.5 mg) in the treatment of sore throat. 6 December 1996

Flurbiprofen	<p>in preparations for topical oral use:</p> <ol style="list-style-type: none"> a. in divided preparations containing 10 mg or less of flurbiprofen per dosage unit, or b. in undivided preparations containing 0.25 % w/v per cent or less or 10 mg or less per dose of flurbiprofen.
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This will allow for the inclusion of future flurbiprofen products e.g. mouthwash or throat spray.

This application requests the MCC to consider the reclassification of flurbiprofen for topical oral use from “Pharmacy Only Medicine” to “General sale” on the following basis:

- Acute sore throat is most often caused by a viral or bacterial infection that is self-limiting and readily recognised by consumers without the intervention of a pharmacist. This is confirmed in a UK survey that only 1% of the population surveyed would seek advice from the pharmacists, while another 1% would visit their doctor.
- Flurbiprofen for topical oral use has been sold worldwide since 1999. The current classification has been in place for over 7 years in Australia and NZ and there have not been any instances of inappropriate use or abuse recorded.
- Flurbiprofen has analgesic, anti-inflammatory and anti-pyretic properties, and at a dose of 8.75 mg in a lozenge formulation has been shown to be effective in relieving the symptoms of sore throat (onset of action about 30 minutes, duration about 2-3 hours. Pharmacodynamic studies have shown that flurbiprofen delivered locally on the pharyngeal mucosa, thereby providing effective relief of pain, swelling and inflammation associated with severe sore throats with little or no systemic side effects.
- The low dose (8.75 mg) present in each lozenge, the maximum daily dose recommended (70 mg) and the total overall dose in a packet of 24 lozenges of 210 mg

- compared with the usual daily dose of oral flurbiprofen (150 mg) suggest that there is little likelihood of systemic adverse effects during the use of the lozenges.
- Flurbiprofen 8.75 mg lozenges are indicated for adults and children over 12 years and about 87 percent of the New Zealand population is in this age group.
 - Periodic Safety Update Reports for the 18-month period from 1 June 2007 to 31 December 2008 showed that there have been a total of 104 events from 48 reports. There were a total of 54 serious adverse events from a total of 14 reports (see Part B). No major safety issues have been identified.
 - The safety of topical oral flurbiprofen is supported by data from clinical trials any by pharmacovigilance monitoring data from regulatory authorities in:
 - i. UK – UK Sentinel database: 11 reports related to flurbiprofen. The adverse events were: myocardial infarction (1), gastrointestinal haemorrhage (1), chest pain (1), anaphylactic reaction (1), meningitis (1), peritonsillar abscess (3), dehydration (1), burning sensation (1), renal colic (1), wheezing (1) and oropharyngeal pain (1).
 - ii. Australia - ADRAC database obtained in April 2009 only showed 2 reports of suspected adverse events: hallucination in one subject and the other subject complained of facial oedema, paraesthesia, pruritus, tongue oedema and urticaria.
 - iii. NZ – CARM Database report – none reported.
 - When compared to the number of lozenges sold globally⁸, and the post-marketing experience showed that the number of adverse events is extremely low.
 - Given the above, flurbiprofen 8.75 mg lozenges has a relatively wide safety margin and because it's low dose is a safer alternative to oral preparations of

⁸ PSUR dated July 2008 (1 June 2007-31 May 2008)

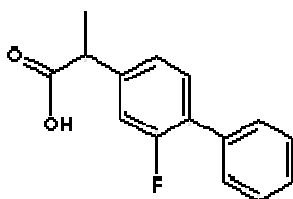
paracetamol, aspirin or ibuprofen for treating sore throat.

- Analgesics like aspirin, paracetamol or ibuprofen are currently effective sore throats treatments. Solid dosage units in small packs (up to 25) are classified “General Sale”. By extending this classification to flurbiprofen for topical oral use will offer the public easier access to an effective and safer option for treating sore throats.
- The availability of flurbiprofen for oral topical use would be greatly improved, particularly in rural remote areas, and in many areas where pharmacies are unable to offer extended opening hours or are inconveniently located by re-classification to “General Sales”.

Part A

1. International Non-proprietary Name (or British Approved Name or US Adopted Name) of the medicine

Flurbiprofen



2. Proprietary name(s)

STREPFEN®

3. Name of company/organisation/individual requesting reclassification

Reckitt Benckiser (New Zealand) Ltd
Lincoln Manor
289 Lincoln Road
Henderson
Auckland
New Zealand

Contact Person: Cheryl Davey

DDI: +64 2 9857 2000

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cheryl.davey@reckittbenckiser.com

4. Dose form(s) and strength(s) for which a change is sought

This change is primarily for flurbiprofen 8.75mg lozenges. There are currently other products under development and will be registered in due course.

5. Pack size and other qualifications

Streptfen Intensive Honey & Lemon flurbiprofen

8.75mg lozenges in packs of up to 24s

Streptfen Intensive Orange sugar-free flurbiprofen

8.75mg lozenges in packs of up to 24s

6. Indications for which change is sought

Flurbiprofen 8.75 mg lozenges:

Relief of pain, swelling and inflammation associated with severe sore throats⁹.

7. Present classification of medicine

Ingredient	Conditions (if any)	Classification
Flurbiprofen	except in throat lozenges containing 10 milligrams or less per lozenge	Prescription
Flurbiprofen	in throat lozenges containing 10 milligrams or less per lozenge	Pharmacy Only

⁹ Copy of the current Streptfen Intensive label
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8. Classification sought

Ingredient	Conditions (if any)	Classification
Flurbiprofen	except in preparations for topical oral use	Prescription
Flurbiprofen	in preparations for topical oral use: c. in divided preparations containing 10 mg or less of flurbiprofen per dosage unit, or d. in undivided preparations containing 0.25 % w/v per cent or less or 10 mg or less per dose of flurbiprofen.	General Sale

9. Classification status in other countries (especially Australia, UK, USA, Canada)

Country	Current Classification	Classification sought
Australia	“Pharmacy Only” since 2002. No limit on pack sizes.	Application for exemption from scheduling submitted 25//9/09 for consideration at the February 2010 Scheduling Meeting
UK	“Pharmacy Only” since 2001. Throat lozenges: maximum strength 8.75 mg; maximum daily dose 43.75 mg; maximum pack size 140 mg	Application for “General Sale” classification submitted 19th of February 2009

USA	Not applicable as flurbiprofen lozenges are not registered.
Canada	Not applicable as flurbiprofen lozenges are not registered.

10. Extent of usage in New Zealand and elsewhere (e.g. sales volumes) and dates of original consent to distribute

Flurbiprofen 8.75 mg lozenges are prescription products in Austria, Belgium, Denmark and Spain and “Pharmacy Medicine” in France, Germany, Ireland, UK (since 2001) and Australia (since 2002). As sales figures which reflect the extent of usage are considered of commercial confidence, reference to this information is included in the NDPSC Submission dated 24 September 2009¹⁰, D) Extent and Patterns of Use of a Substance, para B.53 page 26.

11. Labelling or draft labelling for the proposed new presentation(s)

Please refer to attached labelling for Strepfen Intensive Lozenges⁹.

12. Proposed warning statements if applicable

The following warning statements are on the carton label for Strepfen Intensive lozenges:

Check with your pharmacist or doctor before use:

a. If you are receiving regular treatment with other medications.

¹⁰ Flurbiprofen NDPSC Submission dated 24 September 2009, para B.53 page 26
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- b. *If you have asthma. Most asthmatics can take Strepfen Intensive, but if you are sensitive to aspirin or other anti-inflammatory medicines, do not take this product. If you are unsure, ask your doctor or pharmacist for advice.*

Do not take:

- a. *In the presence of stomach ulcer or other stomach disorders, impaired kidney function or heart failure,*
- b. *If you are allergic to aspirin, flurbiprofen or other anti-inflammatory medicines. If you get an allergic reaction, stop taking and see your doctor immediately.*
- c. *During pregnancy except with your doctor's advice.*
- d. *In the last 3 months of pregnancy.*
- e. *For more than 3 days at a time unless a doctor has told you to. Do not exceed the recommended dose. Excessive use can be harmful*

13. Other products containing the same active ingredient(s) and which would be affected by the proposed change.

A search on the Medsafe Therapeutic Database revealed the following products containing the same active ingredients.

A number of oral flurbiprofen products (Froben 50 mg tablet, Froben 100 mg tablet, Froben SR Modified release capsule 200 mg, Froben Suppository 100 mg) have been discontinued.

Currently Ocufer Eye Drops, solution 0.03% w/v (listed below) are the only other products containing flurbiprofen for the treatment of intraoperative miosis; they would not be affected by the proposed change as they are for ophthalmic use only.

Active Ingredient	Product	Sponsor	Approval date
Flurbiprofen sodium (Flurbiprofen sodium dihydrate)	<u>Ocufen Eye drops, solution, 0.03%w/v, (unit dose) (Prescription)</u>	Allergan New Zealand Limited	28/11/1996
Flurbiprofen sodium dihydrate	<u>Ocufen Eye drops, solution, 0.03%w/v, (unit dose) (Prescription)</u>	Allergan New Zealand Limited	28/11/1996

Part B

Reasons for requesting classification change.

This section should be supported where relevant by the following:

1. A statement of the benefits to both the consumer and to the public expected from the proposed change

Acute sore throat is the very common result of a viral or bacterial infection^{1, 2, 11}. Sore throat is the second most common illness for which Australians seek medical attention. 2006-2007 data from the BEACH (Bettering the Evaluation and Care of Health) project showed that 2.2% of all symptomatic presentations to general practitioners were for throat complaints, second only to cough at 3.8%¹². Sore throat is also one of the most common reasons for prescribing antibiotics, with prescriptions resulting from 88.7% of consultations for sore throat in Australia in 2001⁴.

Sore throat is usually part of a collection of illnesses ranging from the common cold to glandular fever. It may be accompanied by sniffles, coughs, fever, swollen and sometimes tender glands in the neck and generally feeling weak and feverish. Most people (90%) are over their infection by one week, and half are better by about 3.5 days.

In a meta-analysis of available treatments other than antibiotics by Thomas et al⁵, analgesics such as paracetamol (1000 mg dose), aspirin (in adults 800 mg dose) or ibuprofen (200-400 mg dose) seemed to be an effective treatment when used regularly.

Flurbiprofen has been available worldwide in various formulations since 1977. It is a non-steroidal anti-inflammatory drug (NSAID) of the propionic acid group, the same group as ibuprofen and has a similar safety profile. It has analgesic, anti-inflammatory and anti-pyretic

¹¹ New Zealand Doctor Online <http://www.everybody.co.nz/page-5d6072d6-f722-458b-af2c-56485edf30a9.aspx>

¹² <http://www.aihw.gov.au/publications/gcp/gpaa06-07/gpaa06-07.pdf> Table

properties primarily through its ability to inhibit prostaglandin synthesis.

Flurbiprofen 8.75 mg in a lozenge formulation have been shown to be effective in relieving the symptoms of sore throat, with onset of pain relief, reduction in throat soreness and reduction in throat swelling observed 30 minutes after taking a lozenge. The duration of action is between 2-3 hours⁷. Each lozenge contains 8.75 mg of flurbiprofen and the maximum daily dose is 8 lozenges i.e. a total daily dose of 70 mg for a maximum of 3 days. The recommended oral dose in Martindale⁶ is 150 to 300 mg daily with no limit on duration of use for chronic conditions. The maximum daily dose of the lozenges is less than a half a single oral therapeutic dose so is expected to be associated with minimal systemic adverse events.

Reckitt Benckiser would like MCC to consider the reclassification of flurbiprofen in throat lozenges containing 10 milligrams or less per lozenge to “General Sales”. Reckitt Benckiser would also like to request the following “General Sale” classification of flurbiprofen to be worded as follows:

- Flurbiprofen in preparations for topical oral use:
- (i) in divided preparations containing 10 mg or less of flurbiprofen per dosage unit, or
 - (ii) in undivided preparations containing 0.25 % w/v per cent or less or 10 mg or less per dose of flurbiprofen.

2. Ease of self-diagnosis or diagnosis by a pharmacist for the condition indicated

Sore throat can easily be recognised and treated without the intervention of a pharmacist. In a consumer survey conducted in the UK in December 2008³ amongst 1014 individuals who had experienced a sore throat in the last 3 months, only 1% indicated that they would seek the advice of a pharmacist before treating the sore throat and only 1% said they would visit their doctor. These findings may be extrapolated to apply the majority of the New Zealand population who would be able to self-diagnose and self-medicate for this complaint. The Australian NPS Case Study 26² showed that 78% of GPs who participated in a sore throat case study would have prescribed

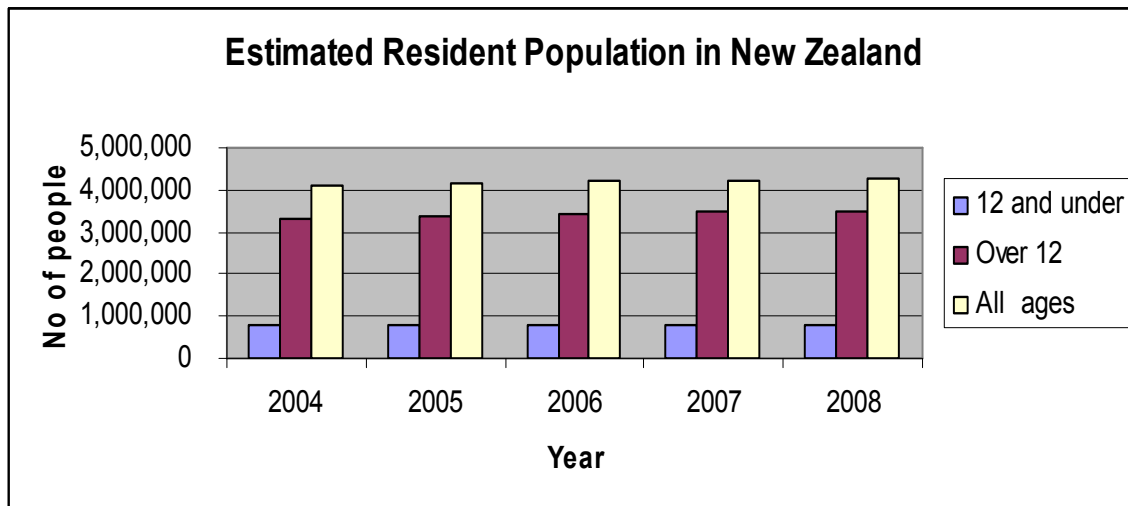
an antibiotic for their patients. Hence, it is important that treatments for sore throats are easily obtainable and effective and so that the consumer would not present in a doctor's surgery unnecessarily seeking treatment with antibiotics.

3. Relevant comparative data for like compounds

Other simple analgesics which are also recommended for sore throats are NSAIDs e.g. aspirin at an oral dose of 300mg or ibuprofen 200 mg and paracetamol. Given small pack sizes of paracetamol, aspirin and ibuprofen are in the "General Sale" classification; inclusion of flurbiprofen in the same classification would benefit the consumer with a safe and effective alternative for treating sore throats.

Active	Pack size	Classification
Aspirin 300 -500 mg	No limit	General Sale
Ibuprofen 200 mg	Up to 25	General Sale
Paracetamol 500 mg	In packs of not more than 10 g	General Sale

4. Local data or special considerations relating to New Zealand



The estimated resident population in New Zealand over the last 4 years, as shown in Figure 1¹³, is showing slow and steady growth and is currently estimated to be about 4.3 million. Eighty-seven percent of the population are over 12 years of age. North Island has about 28 persons per square km, compared with 6.6 persons per square km on South Island and 0.7 persons per square km on the offshore islands.

According to 2008 statistics by the International Communications Union¹⁴, the number of internet users is 72.03 per 100 inhabitants. This is almost comparable to 71.97 per 100 inhabitants in Australia. Advice is often sought from internet sites such as The New Zealand Doctor Online website. This website advice on sore throat¹¹ advocates the use of paracetamol, paracetamol combined with codeine, or with codeine and aspirin for pain relief with in adults. Since parts of New Zealand are relatively sparsely populated, flurbiprofen 8.75 mg lozenges will need to be in the same classification as paracetamol, ibuprofen and aspirin in order to offer a safe and effective medication option for self-treatment of sore throat.

5. Interactions with other medicines

As an NSAID, flurbiprofen in Strepfen Intensive has a potential to interact with the medicines listed below, however, the risk is minimized by the small dose is used and the effects being mainly localized in the throat area.

According to the flurbiprofen product information from the UK¹⁵, the following interactions have been reported to with NSAIDs in general:

Diuretics, ACE inhibitors and Angiotensin II Antagonists:
NSAIDs may reduce the effect of diuretics and other antihypertensive drugs. In some patients with

¹³ http://www.stats.govt.nz/methods_and_services/access-data/tables/national-pop-estimates.aspx

¹⁴ http://www.itu.int/ITU-D/icteye/Reporting/ShowReportFrame.aspx?ReportName=/WTI/InformationTechnologyPublic&RP_intYear=2008&RP_intLanguageID=1

¹⁵ Abbott Froben 100 mg. Summary of Product Characteristics 2 Jan 2010
<http://emc.medicines.org.uk/medicine/19656>

compromised renal function (e.g. dehydrated patients or elderly patients with compromised renal function) the co-administration of an ACE inhibitor or Angiotensin II antagonist and agents that inhibit cyclo-oxygenase may result in further deterioration of renal function, including possible acute renal failure, which is usually reversible. These interactions should be considered in patients taking flurbiprofen concomitantly with ACE inhibitors or angiotensin II antagonists. Therefore, the combination should be administered with caution, especially in the elderly. Patients should be adequately hydrated and consideration should be given to monitoring of renal function after initiation of concomitant therapy, and periodically thereafter.

Cardiac glycosides:

NSAIDs may exacerbate cardiac failure, reduce glomerular filtration rate and increase plasma cardiac glycoside levels.

Anticoagulants:

NSAIDs may enhance the effects of anticoagulants such as warfarin.

Aspirin:

As with other products containing NSAIDs, concomitant administration of flurbiprofen and aspirin is not generally recommended because of the potential of increased adverse effects.

Anti-platelet agents:

Increased risk of gastrointestinal bleeding with NSAIDs

Selective serotonin reuptake inhibitors (SSRIs):

Increased risk of gastrointestinal bleeding with NSAIDs

Lithium salts:

Decreased elimination of lithium.

Methotrexate: Caution is advised in the concomitant administration of flurbiprofen and methotrexate since NSAIDs may increase methotrexate levels.

Ciclosporin:

Increased risk of nephrotoxicity.

Corticosteroids:

Increased risk of gastrointestinal ulceration or bleeding with NSAIDs.

Other analgesics and cyclo-oxygenase-2 selective inhibitors:

Avoid concomitant use of two or more NSAIDs, including Cox-2 inhibitors, as this may increase the risk of adverse effects.

Quinolone antibiotics:

Animal data indicate that NSAIDs can increase the risk of convulsions associated with quinolone antibiotics. Patients taking NSAIDs and quinolones may have an increased risk of developing convulsions.

Tacrolimus:

Possible increased risk of nephrotoxicity when NSAIDs are given with tacrolimus.

Zidovudine:

Increased risk of haematological toxicity when NSAIDs are given with zidovudine. There is evidence of an increased risk of haemathroses and haematoma in HIV (+) haemophilliacs receiving concurrent treatment with zidovudine and other NSAIDs.

6. Contraindications

Strepfen Intensive is contraindicated in the following conditions and these are reflected on the label:

- a. Presence of stomach ulcer or other stomach disorders, impaired kidney function or heart failure.
- b. Hypersensitivity to aspirin, flurbiprofen or other anti-inflammatory medicines.
- c. Last 3 months of pregnancy.

7. Possible resistance

Not applicable

8. Adverse events - nature, frequency etc.

The safety of topical oral flurbiprofen can be supported by the following post-marketing pharmacovigilance monitoring :

- Periodic Safety Update Reports (PSUR) for the seventeen month period (1 June 2007 - 31 December 2008^{8,16}) showed that there have been a total of 104 events from 48 reports. There were a total of 54 serious adverse events from a total of 14 reports. No major safety issues have been identified.
- Global Consumer Reports received by the company for a 6 year period (October 2002 – December 2008)^{Error! Bookmark not defined.}, revealed one serious adverse event report in a 23 year old female who used 8 lozenges over 3 days. She presented with petechiae associated with thrombocytopenia. She was hospitalised, treated with a corticosteroid and discharged. She was recovering at the time of the report.

Although the majority of these reports are usually not medically confirmed, there were no reports of gastrointestinal bleeding in the consumer reports. The most commonly reported non-serious adverse events were gastrointestinal: oral discomfort (2), oral pain (2) and nausea (2). Other events reported more than once included throat irritation (10), drug ineffective (5), dyspnoea (2), burning sensation (2) and dizziness (2).

- Adverse events from clinical trials were seen in a total of 890 reports (a total of 5757 subjects)¹⁰. 19 of these reports were considered serious. Of these, only 2 were treatment related and included one subject with epigastric pain and the other patient reported a burning sensation in the mouth while sucking the lozenges. Most of the AEs are entirely consistent with that which would be expected of a very low dose NSAID taken for a limited period. Most events are mild, with no serious consequences, no requirement for additional healthcare professional intervention, no sequelae and complete resolution, both of the event and of the sore throat. As expected, the incidence of

¹⁶ Flurbiprofen PSUR June 2008-December 2008
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reported events was higher in the studies than in non-study settings.

- Reports from regulatory agencies
 - UK Sentinel database (1 July 1963 to 21 Jan 2009)

There were 11 reports related to flurbiprofen. The adverse events were: myocardial infarction (1), gastrointestinal haemorrhage (1), chest pain (1), anaphylactic reaction (1), meningitis (1), peritonsillar abscess (3), dehydration (1), burning sensation (1), renal colic (1), wheezing (1) and oropharyngeal pain (1)
 - Australia ADRAC database (printout obtained in April 2009)

There were only showed 2 reports of suspected adverse events: hallucination in one subject and the other subject complained of facial oedema, paraesthesia, pruritus, tongue oedema and urticaria.
 - New Zealand CARM database report (printout 12 July 2009)

There were 22 reports for flurbiprofen, all of them related to the tablet formulations. There were no reports were related to Strepfen.

Overall, when compared to the number of lozenges sold globally since 1999¹⁷, the number of adverse events is extremely low.

9. Potential for abuse or misuse.

Like all other NSAIDS, flurbiprofen is not known to have potential for abuse. The potential for deliberate overdose is low. The total dose of flurbiprofen in a pack size of 16 lozenges is 140 mg which is lower than the recommended daily dose of oral flurbiprofen. There is therefore a wide margin of safety. It is unlikely that the whole packet of

¹⁷ Flurbiprofen Submission to NDPSC 24 Sep 2009, Point viii, page 10.

Streptfen Intensive lozenges would be swallowed at one time as the lozenges are 2.4g and is too big to be swallowed.

Conclusion

Sore throat is a minor symptom which is easily identifiable and do not justify a medical consultation. Flurbiprofen 8.75 mg lozenges provide a rapid and spontaneous relief for the pain, swelling and inflammation. The data presented demonstrate substantial safety of the lozenges with a large exposure.

By switching flurbiprofen for topical oral use from a “Pharmacy Only” to “General Sales” will offer a safer option to treatment with small packs of paracetamol, ibuprofen or aspirin products which are currently classified “General Sales”.

Flurbiprofen 8.75 mg lozenges have been on the market since 1999 and its use as a “Pharmacy Only” medicine has been over 7 years. There is no evidence of abuse potential or inappropriate use to date.

Reference	Details
1	NPS Case study 26: Management of sore throat April 2003 http://www.nps.org.au/_data/assets/pdf_file/0012/35400/Case_26_results.pdf
2	NPS “I’ve got a sore throat: Will an antibiotic make me better?” April 2002 http://www.nps.org.au/_data/assets/pdf_file/0019/72154/Sore_throat_and_role_of_antibiotics.pdf
3	Unpublished Reckitt Benckiser Project Switch 2, Consumer Survey, December 2008
4	http://www.nps.org.au/_data/assets/pdf_file/0005/16943/ppr18.pdf
5	Thomas M, Del Mar C, Glasziou P. How effective are treatments other than antibiotics for acute sore throat? Br J Gen Pract 2000; 50: 817-820
6	Martindale 35 th Edition, Flurbiprofen, page 52
7	Unpublished Study BH5009: Benrimoj SI <i>et al.</i> A randomized, double-blind, parallel group, placebo-controlled, investigation of the safety and efficacy of flurbiprofen lozenges (8.75 mg and 12.5 mg) in the treatment of sore throat. 6 December 1996
8	PSUR dated July 2008 (1 June 2007-31 May 2008)
9	Copy of the current Strepen Intensive label
10	See Ref 8 PSUR dated July 2008 – Appendix IIC Company Core DataSheet
11	Flurbiprofen NDPSC Submission dated 24 September 2009, para B.53 page 26
12	New Zealand Doctor Online http://www.everybody.co.nz/page-5d6072d6-f722-458b-af2c-56485edf30a9.aspx
13	http://www.aihw.gov.au/publications/gep/gpaa06-07/gpaa06-07.pdf Table 6.3
14	http://www.stats.govt.nz/methods_and_services/access-data/tables/national-pop-estimates.aspx

- 15 http://www.itu.int/ITU-D/icteye/Reporting/ShowReportFrame.aspx?ReportName=/WTI/InformationTechnologyPublic&RP_intYear=2008&RP_intLanguageID=1
- 16 Abbott Froben 100 mg. Summary of Product Characteristics 2 Jan 2010
<http://emc.medicines.org.uk/medicine/19656>
- 17 Flurbiprofen PSUR June 2008-December 2008
Flurbiprofen Submission to NDPSA 24 Sep 2009, Point viii, page 10.