Beta-blocking agents, for ophthalmic use (alone or in combination with brinzolamide, dorzolamide, brimonidine, travoprost, latanoprost, bimatoprost, pilocarpine) betaxolol - carteolol - levobunolol - metipranolol - timolol and product information on systemic adverse drug reactions after ophthalmic administration.

Final SmPC and PL wording Agreed by the PhVWP in May 2011

Doc.Ref.: CMDh/PhVWP/030/2011

July 2011

# Proposed changes in SmPC based on class review of systemic effects of ophthalmic beta-blockers.

Specific text for betaxolol or timolol only is in **bold.** 

4.2 POSOLOGY AND METHOD OF ADMINISTRATION			
Carteolol, levobunolol, metipranolol, befunolol	Betaxolol	Timolol	
When using nasolacrimal occlusion or closing the eyelids for 2 minutes, the systemic absorption is reduced. This may result in a decrease in systemic side effects and an increase in local activity.	When using nasolacrimal occlusion or closing the eyelids for 2 minutes, the systemic absorption is reduced. This may result in a decrease in systemic side effects and an increase in local activity.	When using nasolacrimal occlusion or closing the eyelids for 2 minutes, the systemic absorption is reduced. This may result in a decrease in systemic side effects and an increase in local activity.	
4.3 CONTRAINDICATIONS			
Carteolol, levobunolol, metipranolol, befunolol	Betaxolol	Timolol	
Hypersensitivity to the active substance (substances), or to any of the excipients.	Hypersensitivity to the active substance (substances), or to any of the excipients.	Hypersensitivity to the active substance (substances), or to any of the excipients.	
Reactive airway disease including bronchial asthma or a history of bronchial asthma, severe chronic obstructive pulmonary disease.	Reactive airway disease including severe bronchial asthma or a history of severe bronchial asthma, severe chronic obstructive pulmonary disease.	Reactive airway disease including bronchial asthma or a history of bronchial asthma, severe chronic obstructive pulmonary disease.	
Sinus bradycardia, sick sinus syndrome, sino-atrial block, second or third degree atrioventricular block not controlled with pace-maker. Overt cardiac failure, cardiogenic shock.	Sinus bradycardia, sick sinus syndrome sino-atrial block, second or third degree atrioventricular block not controlled with pace-maker. Overt cardiac failure, cardiogenic shock.	Sinus bradycardia, sick sinus syndrome sino- atrial block, second or third degree atrioventricular block not controlled with pace- maker. Overt cardiac failure, cardiogenic	

	shock.

substance> is absorbed systemically. Due to beta-adrenergic component, <active substance="">, the same types of cardiovascular, pulmonary and other adverse reactions seen with systemic beta-adrenergic blocking agents may occur. Incidence of systemic ADRs after topical ophthalmic administration is lower than for systemic administration. To reduce the systemic absorption, see 4.2.  substance&gt; is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically.</active></active></active></active></active></active></active></active></active></active></active></active></active></active></active></active></active></active></active></active>	4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE			
ophthalmic agents <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance="">, the same types of cardiovascular, pulmonary and other adverse reactions seen with systemic beta-adrenergic blocking agents may occur. Incidence of systemic ADRs after topical ophthalmic administration is lower than for systemic administration. To reduce the systemic absorption, see 4.2.  ophthalmic agents <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance="">, the same types of cardiovascular, pulmonary and other adverse reactions seen with systemic beta-adrenergic blocking agents may occur. Incidence of systemic ADRs after topical ophthalmic administration. To reduce the systemic absorption, see 4.2.</active></active></active></active></active></active></active></active>		Betaxolol	Timolol	
administration is lower than for systemic administration. To reduce the systemic absorption, see 4.2.	Like other topically applied ophthalmic agents <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance="">, the same types of cardiovascular, pulmonary and other adverse reactions seen with systemic beta-adrenergic blocking agents may occur. Incidence of systemic ADRs after topical ophthalmic administration is lower than for systemic administration. To reduce the systemic</active></active>	ophthalmic agents <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance="">, the same types of cardiovascular, pulmonary and other adverse reactions seen with systemic beta-adrenergic blocking agents may occur. Incidence of systemic ADRs after topical ophthalmic administration is lower than for systemic administration. To reduce the systemic absorption,</active></active>	applied ophthalmic agents <active substance=""> is absorbed systemically. Due to beta-adrenergic component, <active substance="">, the same types of cardiovascular, pulmonary and other adverse reactions seen with systemic beta- adrenergic blocking agents may occur. Incidence of systemic ADRs after topical ophthalmic administration is lower than for systemic administration. To reduce the systemic absorption,</active></active>	

# 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Cardiac disorders:
In patients with cardiovascular diseases (e.g. coronary heart disease, Prinzmetal's angina and cardiac failure) and hypotension therapy with betablockers should be critically assessed and the therapy with other active substances should be considered. Patients with cardiovascular diseases should be watched for signs of deterioration of these diseases and of adverse reactions.

Due to its negative effect on conduction time, beta-blockers should only be given with caution to patients with first degree heart block. Cardiac disorders:
In patients with cardiovascular diseases (e.g. coronary heart disease, Prinzmetal's angina and cardiac failure) and hypotension therapy with betablockers should be critically assessed and the therapy with other active substances should be considered. Patients with cardiovascular diseases should be watched for signs of deterioration of these diseases and of adverse reactions.

Due to its negative effect on conduction time, beta-blockers should only be given with caution to patients with first degree heart block.

Cardiac disorders: In patients with cardiovascular diseases (e.g. coronary heart disease, Prinzmetal's angina and cardiac failure) and hypotension therapy with beta-blockers should be critically assessed and the therapy with other active substances should be considered. Patients with cardiovascular diseases should be watched for signs of deterioration of these diseases and of adverse reactions.

Due to its negative effect on conduction time, betablockers should only be given with caution to patients with first degree heart block.

Vascular disorders
Patients with severe peripheral circulatory
disturbance/disorders (i.e. severe forms of Raynaud's disease or Raynaud's syndrome) should be treated with caution.

Vascular disorders
Patients with severe peripheral circulatory
disturbance/disorders (i.e. severe forms of Raynaud's disease or Raynaud's syndrome) should be treated with caution.

Vascular disorders
Patients with severe
peripheral circulatory
disturbance/disorders (i.e.
severe forms of Raynaud's
disease or Raynaud's
syndrome) should be
treated with caution.

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE		
Respiratory disorders: Respiratory reactions, including death due to bronchospasm in patients with asthma have been reported following administration of some ophthalmic beta- blockers.	Respiratory disorders: Respiratory reactions, including death due to bronchospasm in patients with asthma have been reported following administration of some ophthalmic beta- blockers.	Respiratory disorders: Respiratory reactions, including death due to bronchospasm in patients with asthma have been reported following administration of some ophthalmic beta-blockers.
<brand name=""> should be used with caution, in patients with mild/moderate chronic obstructive pulmonary disease (COPD) and only if the potential benefit outweighs the potential risk.</brand>	For Betaxolol only: Patients with mild/moderate bronchial asthma, a history of mild/moderate bronchial asthma or, mild/moderate chronic obstructive pulmonary disease (COPD) should be treated with caution.	<brand name=""> should be used with caution, in patients with mild/moderate chronic obstructive pulmonary disease (COPD) and only if the potential benefit outweighs the potential risk.</brand>
Hypoglycaemia/diabetes Beta-blockers should be administered with caution in patients subject to spontaneous hypoglycaemia or to patients with labile diabetes, as beta- blockers may mask the signs and symptoms of acute hypoglycaemia.	Hypoglycaemia/diabetes Beta-blockers should be administered with caution in patients subject to spontaneous hypoglycaemia or to patients with labile diabetes, as beta- blockers may mask the signs and symptoms of acute hypoglycaemia.	Hypoglycaemia/diabetes Beta-blockers should be administered with caution in patients subject to spontaneous hypoglycaemia or to patients with labile diabetes, as beta-blockers may mask the signs and symptoms of acute hypoglycaemia.
Beta-blockers may also mask the signs of hyperthyroidism.	Beta-blockers may also mask the signs of hyperthyroidism.	Beta-blockers may also mask the signs of hyperthyroidism.
Corneal diseases Ophthalmic β-blockers may induce dryness of eyes. Patients with corneal diseases should be treated with caution.	Corneal diseases Ophthalmic β-blockers may induce dryness of eyes. Patients with corneal diseases should be treated with caution.	Corneal diseases Ophthalmic β-blockers may induce dryness of eyes. Patients with corneal diseases should be treated with caution.

# 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Other beta-blocking agents
The effect on intra-ocular pressure or the known effects of systemic beta-blockade may be potentiated when <active substance> is given to the patients already receiving a systemic beta-blocking agent. The response of these patients should be closely observed. The use of two topical beta-adrenergic blocking agents is not recommended (see section 4.5).

Other beta-blocking agents
The effect on intra-ocular pressure or the known effects of systemic beta-blockade may be potentiated when <active substance> is given to the patients already receiving a systemic beta-blocking agent. The response of these patients should be closely observed. The use of two topical beta-adrenergic blocking agents is not recommended (see section 4.5).

agents The effect on intra-ocular pressure or the known effects of systemic beta-blockade may be potentiated when <active substance> is given to the patients already receiving a systemic beta-blocking agent. The response of these patients should be closely observed. The use of two topical beta-adrenergic blocking agents is not recommended (see section 4.5).

Other beta-blocking

Anaphylactic reactions
While taking beta-blockers,
patients with history of atopy
or a history of severe
anaphylactic reaction to a
variety of allergens may be
more reactive to repeated
challenge with such allergens
and unresponsive to the usual
dose of adrenaline used to treat
anaphylactic reactions.

Anaphylactic reactions
While taking beta-blockers,
patients with history of atopy
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challenge with such allergens
and unresponsive to the usual
dose of adrenaline used to treat
anaphylactic reactions.

Anaphylactic reactions
While taking betablockers, patients with history of atopy or a history of severe anaphylactic reaction to a variety of allergens may be more reactive to repeated challenge with such allergens and unresponsive to the usual dose of adrenaline used to treat anaphylactic reactions.

Choroidal detachment
Choroidal detachment has
been reported with
administration of aqueous
suppressant therapy (e.g.
timolol, acetazolamide) after
filtration procedures.

Choroidal detachment
Choroidal detachment has been reported with administration of aqueous suppressant therapy (e.g. timolol, acetazolamide) after filtration procedures.

Choroidal detachment Choroidal detachment has been reported with administration of aqueous suppressant therapy (e.g. timolol, acetazolamide) after filtration procedures.

# 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Surgical anaesthesia β-blocking ophthalmological preparations may block systemic β-agonist effects e.g. of adrenaline. The anaesthesiologist should be informed when the patient is receiving <active substance>.

Surgical anaesthesia β-blocking ophthalmological preparations may block systemic β-agonist effects e.g. of adrenaline. The anaesthesiologist should be informed when the patient is receiving <active substance>.

Surgical anaesthesia β-blocking ophthalmological preparations may block systemic β-agonist effects e.g. of adrenaline. The anaesthesiologist should be informed when the patient is receiving <active substance>.

4.5 INTERACTIONS WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTION		
Carteolol, levobunolol, metipranolol, befunolol	Betaxolol	Timolol
No specific drug interaction studies have been performed with <i><active substance=""></active></i> .	No specific drug interaction studies have been performed with <i><active substance=""></active></i> .	No specific drug interaction studies have been performed with <i><active substance=""></active></i> .
There is a potential for additive effects resulting in hypotension and/or marked bradycardia when ophthalmic beta-blockers solution is administered concomitantly with oral calcium channel blockers, beta-adrenergic blocking agents, antiarrhythmics (including amiodarone), digitalis glycosides, parasympathomimetics, guanethidine.	There is a potential for additive effects resulting in hypotension and/or marked bradycardia when ophthalmic beta-blockers solution is administered concomitantly with oral calcium channel blockers, beta-adrenergic blocking agents, antiarrhythmics (including amiodarone), digitalis glycosides, parasympathomimetics, guanethidine.	There is a potential for additive effects resulting in hypotension and/or marked bradycardia when ophthalmic beta-blockers solution is administered concomitantly with oral calcium channel blockers, beta-adrenergic blocking agents, antiarrhythmics (including amiodarone), digitalis glycosides, parasympathomimetics, guanethidine.
		For timolol only: Potentiated systemic betablockade (e.g., decreased heart rate, myocardial* depression) has been reported during combined treatment with CYP2D6 inhibitors (e.g. quinidine, fluoxetine, paroxetine) and timolol.
Mydriasis resulting from concomitant use of ophthalmic beta-blockers and adrenaline (epinephrine) has been reported occasionally.	Mydriasis resulting from concomitant use of ophthalmic beta-blockers and adrenaline (epinephrine) has been reported occasionally.	Mydriasis resulting from concomitant use of ophthalmic beta-blockers and adrenaline (epinephrine) has been reported occasionally.

<sup>\*</sup>There is the print error in the CMD texts (the word "myocardial" is not included). This error will be corrected.

4.6 FERTI	LITY, PREGNANCY AND L	ACTATION
Carteolol, levobunolol,	Betaxolol	Timolol
metipranolol, befunolol	D.,	D
Pregnancy There are no adequate data	Pregnancy There are no adequate data	Pregnancy There are no adequate data for
for the use of <active< th=""><th>for the use of <active< th=""><th>the use of <active substance=""></active></th></active<></th></active<>	for the use of <active< th=""><th>the use of <active substance=""></active></th></active<>	the use of <active substance=""></active>
substance> in pregnant	substance> in pregnant	in pregnant women. <active< th=""></active<>
women. <active substance=""></active>	women. <active substance=""></active>	substance> should not be used
should not be used during	should not be used during	during pregnancy unless clearly
pregnancy unless clearly	pregnancy unless clearly	necessary.
necessary.	necessary.	To reduce the systemic
To reduce the systemic	To reduce the systemic	absorption, see 4.2.
absorption, see 4.2.	absorption, see 4.2.	
Full and the first of the first	Talliantitude des	Epidemiological studies have
Epidemiological studies have not revealed malformative	Epidemiological studies have not revealed	not revealed malformative effects but show a risk for intra
effects but show a risk for	malformative effects but	uterine growth retardation
intra uterine growth	show a risk for intra uterine	when beta-blockers are
retardation when beta-	growth retardation when	administered by the oral route.
blockers are administered by	beta-blockers are	In addition, signs and
the oral route. In addition,	administered by the oral	symptoms of beta-blockade
signs and symptoms of beta-	route. In addition, signs and	(e.g. bradycardia, hypotension,
blockade (e.g. bradycardia,	symptoms of beta-blockade	respiratory distress and
hypotension, respiratory	(e.g. bradycardia,	hypoglycaemia) have been
distress and hypoglycaemia)	hypotension, respiratory	observed in the neonate when
have been observed in the	distress and hypoglycaemia)	beta-blockers have been
neonate when beta-blockers have been administered until	have been observed in the neonate when beta-blockers	administered until delivery. If <i><brand name=""></brand></i> is administered
delivery. If <i><brand name=""></brand></i> is	have been administered	until delivery, the neonate
administered until delivery,	until delivery. If <i><brand< i=""></brand<></i>	should be carefully monitored
the neonate should be	name> is administered until	during the first days of life.
carefully monitored during	delivery, the neonate should	during the met days of me.
the first days of life.	be carefully monitored	
	during the first days of life.	
Lactation	Lactation	Lactation
Beta-blockers are excreted in	Beta-blockers are excreted	Beta-blockers are excreted in
breast milk. However, at	in breast milk. However, at	breast milk. However, at therapeutic doses of <i><active< i=""></active<></i>
therapeutic doses of <active< th=""><th>therapeutic doses of <active< th=""><th>l</th></active<></th></active<>	therapeutic doses of <active< th=""><th>l</th></active<>	l
substance> in eye drops it is not likely that sufficient	substance in eye drops it is not likely that sufficient	substance> in eye drops it is not likely that sufficient
amounts would be present in	amounts would be present in	amounts would be present in
breast milk to produce	breast milk to produce	breast milk to produce clinical
clinical symptoms of beta-	clinical symptoms of beta-	symptoms of beta-blockade in
blockade in the infant. To	blockade in the infant. To	the infant. To reduce the
reduce the systemic	reduce the systemic	systemic absorption, see 4.2.
absorption, see 4.2.	absorption, see 4.2.	

	4.8 UNDESIRABLE EFFECT	ΓS		
Carteolol, levobunolol,	Betaxolol	Timolol		
metipranolol, befunolol				
Like other topically applied ophthalmic drugs, <active< td=""><td>Like other topically applied ophthalmic drugs, <active< td=""><td>Like other topically applied ophthalmic drugs, <active< td=""></active<></td></active<></td></active<>	Like other topically applied ophthalmic drugs, <active< td=""><td>Like other topically applied ophthalmic drugs, <active< td=""></active<></td></active<>	Like other topically applied ophthalmic drugs, <active< td=""></active<>		
substance> is absorbed into	substance> is absorbed into	substance is absorbed into the		
the systemic circulation. This	the systemic circulation.	systemic circulation. This may		
may cause similar	This may cause similar	cause similar undesirable		
undesirable effects as seen	undesirable effects as seen	effects as seen with systemic		
with systemic beta-blocking	with systemic beta-blocking	beta-blocking agents. Incidence		
agents. Incidence of	agents. Incidence of	of systemic ADRs after topical ophthalmic administration is		
systemic ADRs after topical ophthalmic administration is	systemic ADRs after topical ophthalmic administration is	lower than for systemic		
lower than for systemic	lower than for systemic	administration. Listed adverse		
administration. Listed	administration. Listed	reactions include reactions seen		
adverse reactions include	adverse reactions include	within the class of ophthalmic		
reactions seen within the	reactions seen within the	beta-blockers.		
class of ophthalmic beta-	class of ophthalmic beta-			
blockers.	blockers.			
Data from clinical studies including frequencies (if available).				
Additional adverse reactions ha	Additional adverse reactions have been seen with ophthalmic beta-blockers and may			
potentially occur with <brand< td=""><td>name&gt;:</td><td></td></brand<>	name>:			
Carteolol, levobunolol,	Betaxolol	Timolol		
metipranolol, befunolol  Immune system disorders:	Immune system disorders:	Immune system disorders:		
Systemic allergic reactions	Systemic allergic reactions	Systemic allergic reactions		
including angioedema,	including angioedema,	including angioedema,		
urticaria, localized and	urticaria, localized and	urticaria, localized and		
generalized rash, pruritus,	generalized rash, pruritus,	generalized rash,		
anaphylactic reaction.	anaphylactic reaction.	pruritus, anaphylactic reaction.		
Metabolism and nutrition	Metabolism and nutrition	Metabolism and nutrition		
disorders:	disorders:	disorders:		
Hypoglycaemia.	Hypoglycaemia.	Hypoglycaemia.		
Psychiatric disorders:	Psychiatric disorders:	Psychiatric disorders:		
Insomnia, depression,	Insomnia, depression,	Insomnia, depression,		
nightmares, memory loss.	nightmares, memory loss.	nightmares, memory loss.		
	8			
Nervous system disorders:	Nervous system disorders:	Nervous system disorders:		
Syncope, cerebrovascular accident, cerebral ischemia,	Syncope, cerebrovascular	Syncope, cerebrovascular accident, cerebral ischemia,		
increases in signs and	accident, cerebral ischemia, increases in signs and	increases in signs and		
symptoms of myasthenia	symptoms of myasthenia	symptoms of myasthenia		
gravis, dizziness,	gravis, dizziness,	gravis, dizziness, paraesthesia,		
paraesthesia, and headache.	paraesthesia, and headache.	and headache.		

Eye disorders: Signs and symptoms of ocular irritation (e.g. burning, stinging, itching, tearing, redness), blepharitis, keratitis, blurred vision and choroidal detachment following filtration surgery (see 4.4 Special warnings and special precautions for use). decreased corneal sensitivity, dry eyes, corneal erosion ptosis, diplopia.	Eye disorders: Signs and symptoms of ocular irritation (e.g. burning, stinging, itching, tearing, redness), blepharitis, keratitis, blurred vision and choroidal detachment following filtration surgery (see 4.4 Special warnings and special precautions for use). decreased corneal sensitivity, dry eyes, corneal erosion ptosis, diplopia.	Eye disorders: Signs and symptoms of ocular irritation (e.g. burning, stinging, itching, tearing, redness), blepharitis, keratitis, blurred vision and choroidal detachment following filtration surgery (see 4.4 Special warnings and special precautions for use). decreased corneal sensitivity, dry eyes, corneal erosion ptosis, diplopia.
Cardiac disorders: Bradycardia, chest pain, palpitations, oedema, arrhythmia, congestive heart failure, atrioventricular block, cardiac arrest, cardiac failure.	Cardiac disorders: Bradycardia, chest pain, palpitations, oedema, arrhythmia, congestive heart failure, atrioventricular block, cardiac arrest, cardiac failure.	Cardiac disorders: Bradycardia, chest pain, palpitations, oedema, arrhythmia, congestive heart failure, atrioventricular block, cardiac arrest, cardiac failure.
Vascular disorders: Hypotension, Raynaud's phenomenon, cold hands and feet.	Vascular disorders: Hypotension, Raynaud's phenomenon, cold hands and feet.	Vascular disorders: Hypotension, Raynaud's phenomenon, cold hands and feet.
Respiratory, thoracic, and mediastinal disorders: Bronchospasm (predominantly in patients with pre-existing bronchospastic disease), dyspnoea, cough.	Respiratory, thoracic, and mediastinal disorders: Bronchospasm (predominantly in patients with pre-existing bronchospastic disease), dyspnoea, cough.	Respiratory, thoracic, and mediastinal disorders: Bronchospasm (predominantly in patients with pre-existing bronchospastic disease), dyspnoea, cough.
Gastrointestinal disorders: Dysgeusia, nausea, dyspepsia, diarrhoea, dry mouth, abdominal pain, vomiting.	Gastrointestinal disorders: Dysgeusia, nausea, dyspepsia, diarrhoea, dry mouth, abdominal pain, vomiting.	Gastrointestinal disorders: Dysgeusia, nausea, dyspepsia, diarrhoea, dry mouth, abdominal pain, vomiting.
Skin and subcutaneous tissue disorders: Alopecia, psoriasiform rash or exacerbation of psoriasis, skin rash.	Skin and subcutaneous tissue disorders: Alopecia, psoriasiform rash or exacerbation of psoriasis, skin rash.	Skin and subcutaneous tissue disorders: Alopecia, psoriasiform rash or exacerbation of psoriasis, skin rash.

Musculoskeletal and connective tissue disorders: Myalgia.	Musculoskeletal and connective tissue disorders: Myalgia.	Musculoskeletal and connective tissue disorders: Myalgia.
Reproductive system and breast disorders: Sexual dysfunction, decreased libido.	Reproductive system and breast disorders: Sexual dysfunction, decreased libido.	Reproductive system and breast disorders: Sexual dysfunction, decreased libido.
General disorders and administration site conditions: Asthenia/fatigue.	General disorders and administration site conditions: Asthenia/fatigue.	General disorders and administration site conditions: Asthenia/fatigue.

#### PACKAGE LEAFLET

Version 1, 10.6.2011

#### 2. BEFORE YOU USE <Brand name>

Do not use <Brand name, pharmaceutical form > eye drops solution

- if you are allergic to <active substance>, beta-blockers or any of the other ingredients.
- if you have now or have had in past respiratory problems such as asthma, severe chronic obstructive bronchitis.

#### For Betaxolol only

- if you have now or have had in past respiratory problems such as severe asthma, severe chronic obstructive bronchitis
- if you have a slow heart beat, heart failure or disorders of heart rhythm.

#### Take special care with <Brand name>.

Before you use this medicine, tell your doctor if you have now or have had in the past

- o coronary heart disease, heart failure, hypotension,
- o disturbances of heart rate as bradycardia
- o breathing problems, asthma or chronic obstructive pulmonary disease
- o peripheral arterial disease as Raynaud's disease or Raynaud's syndrome)
- o diabetes as <active substance> may mask signs and symptoms of low blood sugar
- o overactivity of the thyroid gland as <active substance> may mask signs and symptoms

Tell your doctor before surgical anaesthesia that you are using **<Brand name>** as **<active substance>** may change effects of some medicines used during anaesthesia.

### Using other medicines

<Brand name> can affect or be affected by other medicines you are using, including other eye drops for the treatment of glaucoma. Tell your doctor if you are using or intend to use medicines to lower blood pressure, heart medicine or medicines to treat diabetes. Please tell your doctor or pharmacist if you are taking or have recently taken any other medicines, including medicines obtained without a prescription.

# Pregnancy and breast-feeding

Do not use <Brand name> if you are pregnant unless your doctor considers it necessary.

Do not use <Brand name> if you are breast-feeding. <Active substance> may get into your milk.

Ask your doctor for advice before taking any medicine during breast-feeding.

#### 3. HOW TO USE <Brand name>.

Always use <Brand name> eye drops solution exactly as your doctor has told you. You should check with your doctor or pharmacist if you are not sure.

After using <Brand name>, press a finger into the corner of your eye, by the nose (picture X) by 2 minutes. This helps to stop <active substance> getting into the rest of the body.

# 4. POSSIBLE SIDE EFFECTS

Like all medicines <Brand name, pharmaceutical form> can cause side effects although not everybody gets them.

You can usually carry on taking the drops, unless the effects are serious. If you're worried, talk to a

doctor or pharmacist. Do not stop using <Brand name> without speaking to your doctor.

The frequency of possible side effects listed below is defined using the following convention

Very common (affects more than 1 user in 10)

Common (affects 1 to 10 users in 100)

Uncommon (affects 1 to 10 users in 1,000)

Rare (affects 1 to 10 users in 10,000)

Not known (frequency cannot be estimated from the available data)

###Product specific side effect should be placed here###

Like other topically applied ophthalmic drugs, <active substance> is absorbed into the blood. This may cause similar side effects as seen with systemic beta-blocking agents. Incidence of side effects after topical ophthalmic administration is lower than for systemic administration. Listed adverse reactions include reactions seen within the class of ophthalmic beta-blockers:

Systemic allergic reactions including angioedema, urticaria, localized and generalized rash, pruritus, anaphylactic reaction.

Hypoglycaemia.

Insomnia, depression, nightmares, memory loss.

Syncope, cerebrovascular accident, cerebral ischemia, increases in signs and symptoms of myasthenia gravis, dizziness, paraesthesia, and headache.

Signs and symptoms of ocular irritation (e.g. burning, stinging, itching, tearing, redness),

blepharitis, keratitis, blurred vision and choroidal detachment following filtration surgery,

decreased corneal sensitivity, dry eyes, corneal erosion, ptosis, diplopia.

Bradycardia, chest pain, palpitations, oedema, arrhythmia, congestive heart failure,

atrioventricular block, cardiac arrest, cardiac failure.

Hypotension, Raynaud's phenomenon, cold hands and feet.

Bronchospasm (predominantly in patients with pre-existing bronchospastic disease), dyspnoea, cough

Dysgeusia, nausea, dyspepsia, diarrhoea, dry mouth, abdominal pain, vomiting.

Alopecia, psoriasiform rash or exacerbation of psoriasis, skin rash.

Myalgia.

Sexual dysfunction, decreased libido.

Asthenia/fatigue.

If any of the side effects get serious, or if you notice any side effects not mentioned in this leaflet, please, tell your doctor or pharmacist.