

## **Dental advice for patients prescribed anti-resorptive or anti-angiogenic drugs for the management of cancer**

### **Why have I been given this leaflet?**

You have told your dentist that as part of your cancer treatment, you are being given a drug that might affect your jaw bone. There is a risk for developing a condition called medication-related osteonecrosis of the jaw (MRONJ). This may result in some bone becoming exposed in your jaw and is a side effect of treatment with these drugs. See overleaf for a list of the drugs associated with MRONJ which can be prescribed for the treatment of cancer.

### **What is the risk of developing this side effect?**

The risk is low as this is an uncommon side-effect of the drug treatment.

### **Should I stop taking the drug?**

No, continue to take your medication. The medical benefits will far outweigh the risks. Talk with your doctor and dentist if you have any questions.

### **What are the risks associated with dental treatment?**

The risk is very low to non-existent for most ordinary treatments. The risk is increased if you require treatment that affects bone (like a tooth extraction) but is still considered low.

### **What are the risks associated with not having dental treatment?**

You may be at increased risk of developing other health problems if a dental disease is not treated. Your dentist will be able to discuss alternative treatment options and the risks associated with them. You should also consult with your doctor about any health risks.

### **Can I decrease my risk of developing this side effect?**

There are several things you can do to reduce the risk of this side effect:

- **Visit your dentist for regular dental check-ups**  
Your dentist will monitor your oral health to ensure that any dental disease that may develop is treated before dental surgery is required.
- **Ensure that you tell your dentist about all the medications you are taking and your medical history**  
Tell your dentist about any health problems that you have and all medicines that you are taking so that the dentist can assess your individual risk for developing MRONJ.
- **Talk to your dentist about oral hygiene**  
Cleaning your teeth regularly and carefully is the best way to prevent oral diseases that may require dental surgery. Your dentist can help you ensure the cleaning technique you use is effective.

### **What else can I do?**

- **Stop smoking**  
Smoking can affect your oral health. There are various services to help you stop/give up. For help and advice in Scotland, call Smokeline (0800 84 84 84) or go to [www.canstopsmoking.com](http://www.canstopsmoking.com).
- **Reduce the frequency of sugary snacks and drinks**  
Regular consumption of sugary snacks and drinks can lead to tooth decay.
- **Reduce the amount of alcohol you drink**  
Regular heavy alcohol consumption can increase your risk of developing some dental diseases.

## Are there signs and symptoms I should look out for?

You should contact your dentist immediately if you notice any of the following symptoms:

- Feeling of tingling, numbness, heaviness or other unusual sensations in your jaw
- Pain in your jaw or a bad taste
- Swelling of your jaw
- Pus or discharge
- Loose teeth
- Exposed bone in your jaw

## If I develop medication-related osteonecrosis of the jaw, how will it be treated?

If your dentist suspects that you have this side effect, you will be referred to hospital to be managed by specialists. In general, for cases where only a small amount of bone is exposed, treatment may be with antibiotics or antibacterial mouth rinses. In cases where more bone is exposed, some surgery may be required. However, the treatment given will depend on your individual symptoms.

**Remember, this side effect is uncommon and the benefits of taking the drug you have been prescribed far outweigh the risks. Looking after your oral health will reduce your risk even more.**

## Drugs Associated with Medication-related Osteonecrosis of the Jaw (MRONJ)

### Anti-resorptive drugs used in the management of cancer

Zoledronic acid (Zometa®), ibandronic acid (Bondronat® or lasibon®), pamidronate disodium (Aredia®) and sodium clodronate (Bonefos®, Clasteon® or Loron®) belong to a class of drugs called the bisphosphonates. These drugs can be given as tablets, injections or infusions. Denosumab (Xgeva®) is given as a monthly injection.

### Anti-angiogenic drugs used in the management of cancer

Bevacizumab (Avastin®), sunitinib (Sutent®) and aflibercept (Zaltrap®) are anti-angiogenic drugs associated with MRONJ. These drugs can be given as capsules or infusions.

## Risk level

For patients taking anti-resorptive or anti-angiogenic drugs for the management of cancer, the risk of developing this side effect is around 1 in 100. The illustration below may help you visualise what this means for you.



Be aware that when thinking about your risk, the frequency stated above includes only people who take the drugs. For example, a risk of 1 in 100 means that, on average, there would be one case of MRONJ for every 100 patients who take the drugs.

## Other resources

You may find additional helpful information on the following websites:

**Cancer Research UK** ([www.cancerresearchuk.org](http://www.cancerresearchuk.org))

**Prostate Cancer UK** ([www.prostatecanceruk.org](http://www.prostatecanceruk.org))

**Myeloma UK** ([www.myeloma.org.uk](http://www.myeloma.org.uk))

**Breast Cancer Care** ([www.breastcancercare.org.uk](http://www.breastcancercare.org.uk))

This leaflet has been developed by the Scottish Dental Clinical Effectiveness Programme (SDCEP), part of NHS Education for Scotland. This and other patient information is available on the SDCEP website ([www.sdcep.org.uk](http://www.sdcep.org.uk)).