#### The only ready-to-use injectable bone substitute tailored for intra-osseous administration



CASE STUDY

- Unique composition Calcium deficient hydroxyapatite for an optimal osteo-integration and conduction
- · High injectability, long workability & high cohesivity Ideal for intra-osseous injection and long surgical procedure
- High mechanical resistance (up to 45MPa) Optimal to strengthen the weakened bone
- Highly radiopaque Suitable for fluoroscopy/CT or radiological filling monitoring

#### Distal radius lytic osteosarcoma





BIOCERA-VET Osteosarcoma RTU

- Aggressive lytic osteosarcoma at the distal radius. Bilaterial severe cortical osteolysis
- Post surgery pain management: carprofen; Osteosarcoma chemotherapy treatment: carboplatin
- Cementoplasty with BIOCERA-VET Osteosarcoma RTU with > 50% filling of the bone cavity with cementoplasty
- Dramatic improvement of the lameness of the patient within 24h post-cementoplasty and maintained up to 13 weeks after cementoplasty (patient still under clinical follow-up)

Case performed by Dr. Shaina Stewart Soule, DVM, PetSound Animal Hospital, USA

Scan me to see Colt impressive clinical improvement





Back to the bone

Case study OSA - ENG - Version 04 - June 2023

Distal radius lytic osteosarcoma

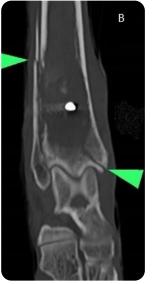
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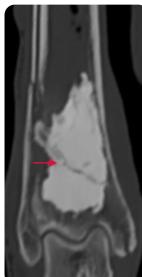
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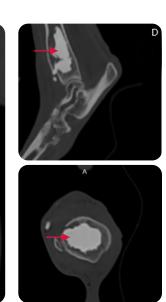
CASE STUDY



Fracture lines



POST-OP



BIOCERA-VET Osteosarcoma RTU

• Aggressive lytic lesion at the right distal tibia and 2 pathological fractures, resulting in a diagnosis of osteosarcoma

Bob, male Greyhound, 10 years-old

- Multimodal palliative treatment considered: microwave ablation (MWA) performed first using CT-guidance.
- Percutaneous cementoplasty with BIOCERA-VET OSTEOSARCOMA RTU performed after suction of defect contents guaranteeing space for the cement & under continuous monitoring by means of CT to ensure the adequate filling of the ablated area.
- Chemotherapy and autologous vaccine administered as part of the multimodal palliative treatment.
- Positive clinical improvement following multimodal management Case performed by Dr. David Sayag, ECVIM-CA Oncology, ONConseil, Toulouse, France





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#### Proximal humerus osteosarcoma



Void caused by the bone tumor

Back to the bone

BIOCERA-VET Osteosarcoma RTU

### Max, male Belgian Malinois, 9 years-old



- Osteosarcoma at the right proximal humerus
- Post surgery pain management: carprofen and gabapentin. Osteosarcoma treatment: carboplatin
- Excellent bone filling and positive clinical improvement after cementoplasty

Case performed by Dr. Shaina Stewart Soule, DVM, PetSound Animal Hospital, USA





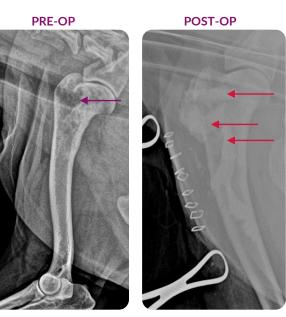
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#### Proximal humerus osteosarcoma



BIOCERA-VET Osteosarcoma RTU

Void caused by the bone tumor



- osteosarcomaPalliative treatment considered: percutaneous cementoplasty
- with BIOCERA-VET OSTEOSARCOMA RTU

Border Collie, 12 years-old

- Suction of bone defect guaranteeing space for the inejction & cementoplasty under continuous monitoring by means of CT to ensure the adequate filling of the ablated area.
- Filling 50% of the lesion with BIOCERA-VET OSTEOSARCOMA RTU achieved with satisfactory clinical improvement after cementoplasty
- Filling of bone cavity with BIOCERA-VET OSTEOSARCOMA RTU

Case performed by Dr. Ciarán Jones, MVB, MS, ACVS, ECVS, MyVet Luncan, Ireland





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#### Distal radius lytic osteosarcoma



PRE-OP

CASE STUDY





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### Tyna, female Leonberger, 8 years-old

- Aggressive lytic lesion at the right distal radius, resulting in a diagnosis of osteosarcoma.
- Cementoplasty with BIOCERA-VET Osteosarcoma RTU. Optimal filling of the bone cavity created by the tumor through aspiration of the cavity contents and injection under fluoroscopic control
- Good improvement of pain and lameness within 24h post-cementoplasty. Satisfactory quality of life up to 2-months. Worsening of the disease from 2-months with end of life at 3-months.

Case performed by Dr. Olivier Gauthier, DVM, Professor of Veterinary Surgery at the College of Veterinary Medecine ONIRIS, Nantes, France



Back to the bone

POST-OP

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### Lytic lesion at the right femur

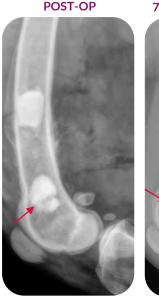
**BIOCERA-VET** Osteosarcoma RTU



#### PRE-OP

CASE STUDY





Hastro, male Newfoundland dog, 10 years-old 7 WEEKS POST-OP

#### **15 WEEKS POST-OP**



 Aggressive lytic lesion, with an atypical presentation, at the distal third of the right femur with confirmed diagnosis of appendicular osteosarcoma.

- Percutaneous cementoplasty with BIOCERA-VET OSTEOSARCOMA RTU alone.
- Good improvement of pain and lameness within 24h post-cementoplasty. Good quality of life maintained as far as 20 weeks after cementoplasty

Case performed by Dr. Olivier Stievenart, DVM, Surgivet, Belgium



Scan me to see Hastro clinical improvement





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#### Distal radius lytic osteosarcoma Alfred, male Anatolian Shepherd, 10 years-old





Back to the bone

CASE STUDY



→ BIOCERA-VET Osteosarcoma RTU

#### 1 MONTH POST-OP



- Aggressive osteoproliferative and osteolytic lesion at the distal radius, compatible with osteosarcoma
- Palliative treatment by cementoplasty with BIOCERA-VET OSTEOSARCOMA RTU
- Good filling of the cavity with good improvement of lameness and pain.
- Increase of the osteoproliferation and soft tissue swelling associated to the tumor progression observed at 1-month follow-up.

Case performed by Dr. Luis Chambel, DVM and practice owner at VetOeiras Veterinary Hospital Evidensia, Portugal



