

embolization and were sacrificed after follow-up angiogram on day 2 and 21 of embolization, respectively. Degradation of the GMP and pathological changes were evaluated. For *in vitro* study, each GMP was mixed with saline and placed in a 37°C thermostat. Macroscopic and microscopic morphological changes of GMPs were compared for 2 weeks. **Results:** Both high and low MW spherical GMPs showed effective embolic results. On 2-day follow-up angiography, vessels were slightly recanalized to a similar degree. However, in low MW group, embolized arteries were reperfused to a greater extent on day 21, compared to the high MW GMP. Histologically, perivascular inflammation and fibrosis were more frequently identified in high MW group. In *in vitro* study, low MW GMP lost the spherical shape and degraded on day 5 and was invisible on microscopy, whereas high MW GMP was only partially degraded after 2 weeks. **Conclusion:** Low MW fish-derived spherical GMP revealed short-term embolic effect and provided early recanalization of the occluded arteries with low inflammatory response.

#### OR4.7

### Stimulant Antibiotic-Impregnated Beads for the Treatment of Diabetic Foot Infection and Vascular Graft Infection

**Hazel Ting Wai Chon, Maher Hamish, Hiba Abdalla**

*Northamptonshire Vascular Surgery Unit, Northampton General Hospital, Northampton, United Kingdom.  
E-mail: hazelchon11@gmail.com*

**Objectives:** Limited evidence has been found on the effectiveness of Stimulan antibiotic beads for the treatment of diabetic foot ulcer or vascular graft infection, and it is still yet to be explored. Our goal was to review the healing effect, the rate of infection eradication, the graft preservation, and the length of postoperative hospital stay in patients who acquired prosthetic graft infection and diabetic foot infection and hence compare the results of both. **Methods:** This was a retrospective review of patients implanted with Stimulan antibiotic beads at Northampton General Hospital in England from 2017 to 2019. A cohort of 22 patients aged between 45 and 92 was used in this study to compare the postoperative outcome of the wound and the duration of healing and follow-up. **Results:** Nineteen patients with diabetic foot infection and three patients with local vascular graft sepsis were treated with Stimulan antibiotic beads insertion. Grafts such as aorto-bifemoral bypass, femoral-to-femoral crossover, and femoral distal popliteal bypass were included. The average length of hospital stay for the patients with Stimulan beads insertion was 8 days. For healing effect, 82% of the patients (18 in 22 patients) had healed wounds within the first follow-up appointment, two patients had a partial healing effect which required further follow-up appointments, and two patients showed no signs of healing and needed re-admission. 9% of the main study group had a new onset of infection elsewhere. **Conclusion:** This study concluded the success of Stimulan antibiotic beads being used as the treatment of diabetic foot infection and local vascular graft sepsis, especially in patients with major vascular reconstruction. Stimulan antibiotic beads should be considered as one of the effective managements in treating vascular graft infection and diabetic foot infection.

#### OR4.8

### Survival Benefit of Aggressive Treatment Approaches Incorporating Yttrium-90 Radioembolization for Late-Stage Hepatocellular Carcinoma

**Monica M. Matsumoto, Priyali Saxena, Ahmed Gabr<sup>1</sup>, Ahsun Riaz<sup>1</sup>, Robert J. Lewandowski<sup>1</sup>, Riad Salem<sup>1</sup>, Samdeep K. Mouli<sup>1</sup>**

*University of Chicago Pritzker School of Medicine, <sup>1</sup>Northwestern University, Chicago, United States.  
E-mail: mmmatsumoto3@gmail.com*

**Objectives:** To evaluate treatment allocation and outcomes for Barcelona Clinic Liver Cancer (BCLC) stage C and D hepatocellular carcinoma (HCC) following our institution's multidisciplinary approach utilizing yttrium-90 radioembolization (Y90). **Methods:** All new HCC diagnoses discussed at our multidisciplinary tumor board, 2010–2013, were included. Charts were reviewed for demographics, tumor characteristics, laboratory values, treatment, and outcomes on an intention-to-treat basis (resection, transplant, ablation, Y90, transarterial chemoembolization, sorafenib, palliative therapy). Patients received a BCLC stage at initial treatment. Survival analyses were performed from first treatment date until death, loss to follow-up, or end of capture period (April 2, 2019). **Results:** Over 4 years, 321 treatment-naïve patients with HCC were enrolled, of which 33% were BCLC C and 15% were BCLC D. Between these two stages, the median age was 61 years with predominance of hepatitis C-associated disease (39%, 60). Median follow-up and median overall survival (mOS) were 13 and 15 months (95% confidence interval [CI] 18–88), respectively. Table 1 describes treatment groups and BCLC-discordance by stage. Y90 comprised 65% and 50% of BCLC-discordant treatments in BCLC C and D patients, respectively. BCLC-discordant patients had longer mOS in BCLC C (hazard ratio [HR] 0.27, 95% CI: 0.12–0.60, 25 vs. 4 months,  $P = 0.001$ ) and D (HR 0.16, 95% CI: 0.06–0.39, 47 vs. 2 months,  $P < 0.001$ ) groups. mOS of BCLC C and D patients bridged to curative therapy was 64 (43–81) and 72 (58–85) months, respectively. Actual mOS was longer in Y90 (43 vs. 32 months,  $P < 0.001$ ) and transplant (61 vs. 16 months,  $P < 0.001$ ) groups compared to expected mOS by BCLC stage. **Conclusion:** This analysis of a large cohort of untreated HCC demonstrates significant survival benefit in BCLC C and D patients when incorporating Y90 in the treatment algorithm, supporting more aggressive locoregional therapies that limit disease progression.

#### OR4.9

### Prostatic Artery Embolization for the Treatment of Chronic Bacterial Prostatitis: An Early Experience in Four Cases with 1-Year Follow-Up

**Karim Ahmed Abd El Tawab, Rana Tarek Khafagy**

*Ain Shams University, Cairo, Egypt.  
E-mail: karimabdeltawab@gmail.com*

**Objectives:** Chronic bacterial prostatitis (CBP) is a common health problem affecting about 10% of males, characterized by recurrent episodes of urinary tract infections with devastating