Table 1 HGMCR SNPs as predictors of future cardiovascular events in T2DM patients

SNP	HR [95%CI]	p-value
rs3761739	1.68 [1.04–2.73]	0.035
rs10515198	1.38 [0.78–2.42]	0.268
rs3846662	1.69 [1.16–2.44]	0.006
rs7717396	2.76 [1.21–6.30]	0.016
rs3846663	1.71 [1.19–2.47]	0.004
rs4703670	1.58 [1.03–2.42]	0.037
rs12654264	1.71 [1.19–2.47]	0.004
rs12916	1.74 [1.20–2.53]	0.003

HR hazard ratio, *SNP* single nucleotide polymorphism

As is shown in the table all variants apart from tagging variant rs10515198 significantly predicted future cardiovascular events in patients with T2DM after multivariate adjustment including LDL cholesterol and statin therapy.

We conclude that in patients with T2DM common HMGCR variants significantly predict cardiovascular events.

Postersitzung IX: Pulmonale Hypertenion 1

IX-1

Endothelin receptor blockade in heart failure with diastolic dysfunction and pulmonary hypertension (BADDHY-Trial)

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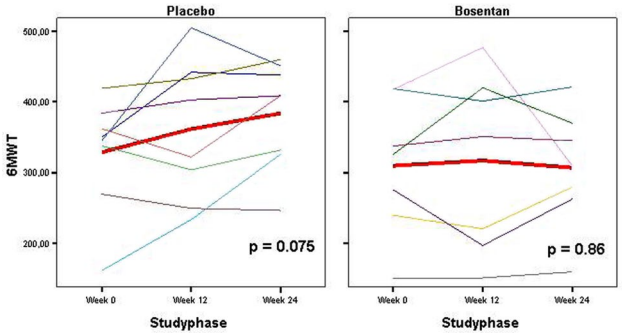
Background: About 70–83 % of patients with heart failure and preserved ejection (HFpEF) develop pulmonary hypertension (PH).

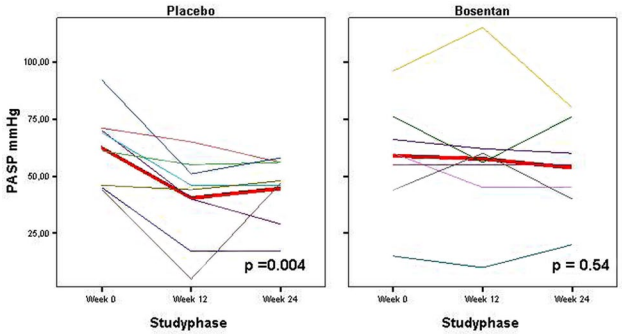
Materials and methods: In this multicentre, randomised placebo-controlled pilot trial we investigated clinical and hemodynamic effects of the endothelin-receptor blocker bosentan in patients with HFpEF and PH (PH-HFpEF). Eligible probands received either 12 weeks bosentan or placebo. At study entrance, week 12 and a follow up at week 24—a six minute walking test (6MWT), an echocardiography, and a laboratory assessment were performed, as well as the minnesota living with heart failure questionnaire and the short form 36 filled out. Right heart catheterization was conducted at screening only.

Results: The study was aborted due to an interims analysis after 20 patients had been included. 15 patients completed follow up. None of the bosentan treated patients experienced worsening of heart failure. 6MWT did not change in the bosentan group, but tentatively increased in the placebo group from 328.8 ± 79.6 m (study entrance) to 361.6 ± 98.2 mmHg (week 12) and 384.0 ± 74.9 m (week 24); $p = 0.075$ (Fig. 1). In the placebo group echocardiographic estimated systolic pulmonary artery pressure significantly decreased [62.3 ± 16.7 mmHg (study entrance), 40.4 ± 19.9 mmHg (week 12), 44.6 ± 14.5 mmHg (week 24); $p = 0.004$ (Fig. 2)] as did right atrial pressure [13.1 ± 5.3 (study entrance), 10.0 ± 3.8 (week 12), and 9.4 ± 3.2 (week 24); $p = 0.046$]. Both parameters did not change in the bosentan group.

Discussion: Endothelin receptor blockade in patients with PH-HFpEF may be safe, but does not improve exercise capacity, quality of life or echocardiographic assessed hemodynamic parameters.

Clinical trial registration: http://www.clinicaltrials.gov/ct2/show/NCT00820352?term=BADDHY&rank=1, NCT00820352.





IX-2

First promising experience with the surgical exchange of a gas-driven implantable pump in a patient with pulmonary arterial hypertension in a center having implanted more than 30 pumps

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Introduction: Intravenous (iv.) administration of treprostinil by a gas-driven implantable pump offers relevant advantages: Absence of site pain, which is frequent with subcutaneous (sc.) administration and a minimized risk of possibly life-threatening line-infections as compared to iv. administration with external pumps. As previously reported implantation is only offered to stable patients with severe site pain under sc. treprostinil. Treprostinil uptitration is done exclusively sc. at our center. Since 2010 we have successfully implanted 33 pumps. Since the first patient standard operation procedures (SOPs) for pre-, peri- and postoperative management are in use. During long-term follow-up an increased flowrate was observed leading to adoption of the refill interval. A second generation of this pump is under development. One pump twisted due to