but requires some attempts. Transesophageal echocardiography confirmed right pump placement and no interference between valve leaflet movements and outflow-tip antegrade flow. A trivial aortic regurgitation was detected, probably because of the relative stiffness of prosthetic compared with natural valve leaflets. The postoperative course was characterized by persistent oliguria that required central veno–venous haemofiltration, with slow improvement of cardiac function. Inotropic support was continued for 6 days and then slowly decreased. After 15 days of support, the patient was weaned from the device and discharged home. Follow-up echocardiography showed markedly improved left ventricular contractility and good performance of the aortic valve without signs of damage to the leaflets.[4]

We agree with the author that in the setting of postcardiotomy heart failure, deciding when to start a patient on mechanical support without wasting any precious time is the key to success. Recently, we have introduced in our clinical practice the IABP score as a very useful tool in the decision-making process of mechanical support in postcardiotomy heart failure. Hausmann and colleagues[3] defined an IABP score based on 4 parameters they found statistically significant to predict survival or death 1 hour after IABP implantation in patients with low-output syndrome in cardiac surgery. The Hausmann IABP score has been validated also by Siegenthaler and associates[5] in their study of 24 patients supported with the Impella LD for postcardiotomy heart failure. In addition, they were able to identify patients who will not benefit from the Impella Recover. Patients with a residual cardiac function of 1 L/min or less had an 88% chance of death. This observation is likely due to the fact that the Impella device provides insufficient support in the presence of virtually absent myocardial function.

In conclusion, we agree with the authors that timely insertion of such a device in the postcardiotomy setting, even in borderline situations or after stented biologic aortic valve prosthesis implantation, can provide a greater chance of survival in a poor-prognosis population. Careful clinical, hemodynamic, and residual cardiac function evaluation can allow surgeons to stratify patients for prolonged IABP-inotropic support or timely Impella implantation or even to receive a conventional left ventricular assist device if cardiac performance is dismal.

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Off-pump pulmonary valve implantation

To the Editor:

We would like to comment on the article by Berdat and Carrel[1] entitled "Off-pump pulmonary valve replacement with the new Shelhigh Injectable Stented Pulmonic Valve." They are to be congratulated for having embarked on a novel approach.

Because we have also reported recently on our first surgical experience implanting the Shelhigh valve, 2 points should be made.[2]

First, it is misleading to report on a pulmonary valve "replacement" in this setting. All 4 patients from the mentioned group had either undergone the transannular patch procedure during tetralogy of Fallot repair or commissurotomy. Likewise, we have also gained, to date, experience with a total of 6 patients (mean follow-up, 7.8 months; range, 2.0-13.5 months). All of these had previous tetralogy of Fallot repair. Therefore use of the Shelhigh valve in its current form allows only for valve "implantation" because the stented valve can only self-expand and the original pulmonary valve apparatus remains obviously in situ.

Second, we disagree with the judgment that a reduction plasty for an enlarged main pulmonary trunk of larger than 28 mm is mandatory to ensure an adequate position of the stented valve. Berdat and Carrel[1] made this statement on their experience with 1 patient only. In our experience with 6 patients (valve sizes, 23-31 mm), perioperative assessment included the whole right ventricular outflow tract, dimensions of the right ventricle to pulmonary trunk junction, sinus of Valsalva, pulmonary trunk, and pulmonary bifurcation. Interestingly, the final position of the stented valve was, in our experience, at different sites: at the level of the pulmonary valve, just above it, and even much more distally just in front of the bifurcation. Therefore we would rather emphasize the need for both transesophageal and epicardial echocardiographic navigation and "oversizing" of at least 2 mm to allow for a perfect fit of this new valve along its struts.

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Reply to the Editor:

We appreciate the comments by Schreiber and Lange. We believe that making a difference between "implantation" and