Author (date)	N	Study type	LVEF (%)	Age	Success	Follow-up	Outcomes
Li et al. (2020) [1]	37 54	PO/HC	28.8 ± 4.5 27.2 ± 4.9	57.5 ± 9.8 58.5 ± 8.5	81.1%	6 months	- Postprocedural LVEF: 44.3 ± 8.7 vs. 35.0 ± 10.5; p < 0.001 - Paced QRS duration: 121.8 ± 10.8 ms vs 158.2 ± 21.5 ms; p< 0.001 - Echocardiographic response*: 88.9% vs. 66.7%, p = 0.035 - Super response†: 44.4% vs. 16.7%, p = 0.007 - HF-related hospitalization: 0% vs. 0%
Wu et al. (2021) [2]	32 54	RO	30.9±7.3 30.0±6.2	67.2 ± 13 68.3 ± 10	100% 88.5%	12 months	- Change in LVEF: 24.0% ± 10.9 vs 16.7% ± 14.6; p= 0.015 - Super response†: 70% vs. 44.9%; p=0.004 - Postprocedural NYHA Class: 1.3 ± 0.5 vs 1.9 ± 0.9; p=0.002 - Paced QRS duration: 104.3 ± 8.1 ms vs 135.8 ± 20.2 ms; p NR
Wang et al. (2020) [3]	10 30	PO	26.8 ± 3.85 26.38±5.27	64.8 ± 7.25 62.9 ± 10.33	100% 61.2%	6 months	- Postprocedural LVEF: 45.66 ± 9.22% vs 39.35 ± 12.29%; p <0.001 - Postprocedural NYHA: 1.5 ± 0.55 vs. 1.97 ± 0.61 p <0.001 - Paced QRS duration: 122.8 ± 17.24 ms vs 141.6 ± 15.38 ms p <0.001
Guo et al. (2020) [4]	21 21	PO	30.0 ± 5.0 29.8 ± 4.1	66.1 ± 9.7 65.1 ± 7.5	87,00% NA[a]	14.3 ± 7.2 months	- Postprocedural LVEF: 50.9 ± 10.7% vs. 44.4 ± 13.3; p= 0.12 - Postprocedural NYHA: 1.3 ± 0.9 vs. 1.5 ± 0.7 p=0.06 - Paced QRS duration: 111.7 ± 12.3 ms vs. 130.1 ± 14.0 ms; p < 0.001 - Echocardiographic response*: 90.5% vs 80.9%; p= 0.43 - Super response‡: LBBP group 80.9% vs 57.1%; p= 0.09
Zu et al. (2021) [5]	13 19	PO	30.62 ± 6.98 29.11 ± 4.82	61.77 ±12.37 59.32 ± 5.41	100% 89%	12 months	- Postprocedural LVEF: 48.92 ± 8.06% vs. 42.53 ± 4.89%; p < 0,05 - Paced QRS: 117.15 ± 9.91 ms vs 130.32 ± 12.41 ms; p = 0.002
Chen et al. (2022) [6]	49 51	PO	29.05 ± 5.09 28.36 ± 5.30	67.14 ± 8.88 64.37 ± 8.74	98% 91%	12 months	- Postprocedural LVEF: 47.58 ± 12.02% vs. 41.24 ± 10.56%; p= 0.008 - Paced QRS duration: 102.61 ± 9.66 ms vs 126.54 ± 11.67ms; p < 0.001.
Liu et al. (2021) [7]	27 35	PO	29.9 ± 4.8 29.5 ± 4.9	65.5 ± 8.8 64.3 ± 8.4	79,00% NR	4.0 ± 1.4 months	- Change in LVEF: 17,2 ± 9,3% vs 13,7 ± 11,5%; p= 0.113 - Change NYHA: −1.6 ± 0.6 vs. −0.9 ± 0.8; p= 0.001 - Change in QRS duration: −64.1 ±18.9 ms vs. −32.5 ± 22.3ms; p < 0.001 - Echocardiographic response§: 88.9% vs 68.6%; p NR
Ivanovski et al. (2022) [8]	10 13	RO	28 [20-42] 38 [35-40]	69 [67-78] 70 [67-73.5]	100% 100%	2 months [1–3.25] 5 months [3.5–6]	- Change in LVEF: 40% [31-44] vs. 37% [35-41]; p= 0.041 - Paced QRS duration: 127 ± 13 ms vs 172 ± 13 ms; p < 0.001
Wang et al. (2022) [9]	20 20	RCT	28.3±5.3 31.1±5.5	62.3±11.2 65.3±10.6	90% 80%	6 months	- Change in LVEF: 21.08% ± 1.91 vs 15.62% ± 1.94; p =0.039 - Change in NYHA: -1.22 ± 0.11 vs -1.10 ± 0.11; p NS - Paced QRS duration: 131.5 ±12.5 ms vs 136.6 ± 12.9 ms; p NS

Diaz et al. (2023) [10]	128 243	PO	25.2±8.3 26.7±7.2	69.8±10.1 69.8±11.8	84.4%⁂ 94.7%	340 days [205.5-476.5]	- Composite (All-cause mortality and HF hospitalization): 24.2% vs 42.4% (HR: 0.621, 95% CI: 0.415-0.93; p= 0.021) - HF-related hospitalization: 22.6% vs 39.5% (HR: 0.607, 95% CI: 0.397-0.927; p =0.021) - All-cause mortality: 5.5% vs 11.9%; p = 0.19 - Paced QRS: 123.7 ± 18.8 ms vs 149.3 ± 29.1 ms; p < 0.001. - Postprocedural LVEF - Change in LVEF: 8.04 ± 9.9% vs 3.9 ± 7.9%; p < 0.001 - Complications: 9.4% vs 15.2%; p= 0.146
Vijayaraman et al. (2023) [11]	797 981	RO	27±6 26±6	69±12 68±12	NR NR	33 ± 16 months.	- Composite (All-cause mortality and HF hospitalization): 21% vs 28% (HR: 1.495, 95% CI 1.213-1.842; p <0.001) - HF-related hospitalization: 12% vs 19% (HR: 1.494, 95% CI 1.159 - - 1.927; p=0.002) - All-cause mortality: 12% vs. 17% (HR: 1.144, 95% CI 0.881-1.485; p=0.303) - Change in LVEF: 13±12% vs 10 ± 12%; p<0.001 - Postprocedural NYHA: 2.01 ± 0.7 vs 2.19 ± 0.8; p<0.001 - Paced QRS duration: 128 ± 19 vs 144 ± 23; p < 0.001 - Complications: 3.8% vs 7.5%; p <0.001

Supplementary Table. Characteristics of studies comparing LBBAP with BIVP in patients with HF. Abbreviations as in text.

* Echocardiographic response was defined as at least 5% increase vs baseline.
† Super response was defined as an increase in the LVEF to ≥ 50%.
‡ Super response was defined as NYHA functional class I or II + improvement in LVEF for at least 15% or a final LVEF>45%, And a decrease in LVESD >15%.
§ Echocardiographic response was defined as ≥10% absolute increase in LVEF.
⁂ Procedural success was defined as capture of the LBB. In all patients, LBBAP was achieved.
[a] Controls were patients with successful BiVp, and as such the success rate is not available.

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