

**Supplementary Table 1.** Ratio of means of NAS meta-analysis of bariatric intervention in obese patients

Author (year)	No. of samples	Ratio of mean (95% CI)	
		BMI	NAS
After 3–6 months			
Aldoheyan et al. (2017) <sup>24</sup>	27	0.77 (0.70–0.84)	-
Lee et al. (2012) <sup>20</sup>	8	0.95 (0.84–1.07)	0.40 (0.30–0.54)
von Schönfels et al. (2018) <sup>21</sup>	257	0.74 (0.71–0.77)	0
Overall		0.81 (0.58–1.12)	0.40 (0.40–0.40)
Heterogeneity - I <sup>2</sup>		86.4% (60.8%–95.3%)	-
P-value		<0.001	-
After 12–24 months			
Caiazzo et al. (2014a) <sup>26,†</sup>	681	0.72 (0.71–0.74)	0.35 (0.30–0.41)
Caiazzo et al. (2014b) <sup>26,†</sup>	555	0.85 (0.84–0.87)	0.65 (0.56–0.75)
Esquivel et al. (2018) <sup>28</sup>	63	0.68 (0.65–0.71)	-
Fazel et al. (2007) <sup>29</sup>	43	0.70 (0.65–0.75)	-
Furuya et al. (2007) <sup>30</sup>	18	0.60 (0.56–0.64)	-
Liu et al. (2007) <sup>33</sup>	39	0.62 (0.58–0.66)	0.40 (0.35–0.47)
Mathurin et al. (2009) <sup>34,†</sup>	381	0.78 (0.76–0.80)	0.54 (0.46–0.64)
Mattar et al. (2005) <sup>35</sup>	70	0.70 (0.65–0.75)	-
Salman et al. (2020) <sup>41</sup>	94	0.77 (0.75–0.79)	0.51 (0.44–0.58)
Salman et al. (2021) <sup>42</sup>	67	0.78 (0.76–0.80)	-
Verrasto et al. (2023a) <sup>43</sup>	77	0.68 (0.66–0.71)	0.99 (0.92–1.08)
Verrasto et al. (2023b) <sup>43</sup>	79	0.76 (0.73–0.78)	1.09 (0.93–1.28)
Chaim et al. (2020) <sup>27</sup>	30	0.68 (0.64–0.72)	-
Overall		0.72 (0.68–0.76)	0.60 (0.40–0.89)
Heterogeneity - I <sup>2</sup>		96.5% (95.2%–97.4%)	97.6% (96.5%–98.4%)
P-value		<0.001	<0.001
After 36–60 months			
Caiazzo et al. (2014a) <sup>26,‡</sup>	681	0.77 (0.76–0.79)	0.35 (0.27–0.46)
Caiazzo et al. (2014b) <sup>26,‡</sup>	555	0.80 (0.78–0.82)	0.59 (0.49–0.70)
Kral et al. (2004) <sup>13</sup>	104	0.66 (0.62–0.70)	-
Lassailly et al. (2020) <sup>32</sup>	180	0.75 (0.72–0.78)	-
Mathurin et al. (2009) <sup>34,‡</sup>	381	0.75 (0.73–0.77)	0.51 (0.42–0.62)
Meinhardt et al. (2006) <sup>36</sup>	50	0.68 (0.62–0.73)	-
Russo et al. (2021) <sup>40</sup>	37	0.67 (0.62–0.72)	0.54 (0.44–0.66)
Overall		0.73 (0.68–0.79)	0.50 (0.35–0.70)
Heterogeneity - I <sup>2</sup>		91.3% (84.6%–95.1%)	71.5% (18.8%–90%)
P-value		<0.001	0.015

BMI, body mass index; NAS, nonalcoholic fatty liver disease activity score.

† and ‡ indicate same cohort with different follow-up time frame.