Correction to: Dedicated breast CT: state of the art—Part II. Clinical application and future outlook

Yueqiang Zhu¹ · Avice M. O'Connell² · Yue Ma¹ · Aidi Liu¹ · Haijie Li¹ · Yuwei Zhang¹ · Xiaohua Zhang³ · Zhaoxiang Ye¹

Published online: 14 February 2022
© European Society of Radiology 2021

Correction to: European Radiology

<https://doi.org/10.1007/s00330-021-08178-0>

The original version of this article, published on 03 September 2021, unfortunately contained mistakes.

In Table 1 the reference for Zhao should have been reference [34], NC has been deleted from Aminololama-Shakeri's study and the mean granular dose column has been amended. In Figure 2 “NC” was incorrectly written as “NE”. A wrong table has been published as Table 2 which has therefore been exchanged with the correct version. In Table 3, “CE-CBBCT only (Dense)” has been amended to “CE-CBBCT alone (Dense)”. In section “Histopathology prediction”, the “with”

was missing from the following sentence “Furthermore, Zhu et al [57] explored the CBBCT features which could differentiate intrinsic subtypes of HER2+ breast cancer according to hormone receptor status and found that concavity and with non-mass enhancement (NME) were independent indicators.” In references 25, the article title was incorrect, and in reference 11, the name of the first author was incorrect.

The revised versions of the tables and the figure are given below. The original article has been corrected.

The original article can be found online at <https://doi.org/10.1007/s00330-021-08178-0>.

✉ Zhaoxiang Ye
yezhaoxiang@163.com

¹ Department of Radiology, Tianjin Medical University Cancer Institute and Hospital, National Clinical Research Center for Cancer, Key Laboratory of Cancer Prevention and Therapy, Tianjin, Tianjin's Clinical Research Center for Cancer, Key Laboratory of Breast Cancer Prevention and Therapy, Tianjin Medical University, Ministry of Education, Huan-Hu-Xi Road, Ti-Yuan-Bei, Hexi District, Tianjin 300060, China

² Department of Imaging Sciences, University of Rochester Medical Center, 601 Elmwood Avenue, Box 648, Rochester, NY 14642, USA

³ Koning Corporation, Lennox Tech Enterprise Center, 150 Lucius Gordon Drive, Suite 112, West Henrietta, NY 14586, USA

Table 1 Characteristics of studies about diagnostic accuracy of CBBCT

Author	Year	No. of patients	Mean age (yrs)	Pre-menopausal percentage	Breast density	CBBCT scanner	NC/CE	MGD (mGy)	Breast lesions with μ Ca	Cutoff value	Agreement and experience	Δ CT (HU) malign vs. benign
Zuley [31]	2011 Nov	50	48	—	—	UCD	NC&CE	—	—	B/M	—	—
Belair [32]	2012 Nov	60	—	—	—	UCD	NC	—	0%	7-point	—	—
Zuley [33]	2013 Dec	97	—	—	—	UCD	NC	—	—	POM	—	—
Zhao [34]	2015 Jan	65	55.6	—	—	Konig	NC	5.88–24.84	64.7% (55/85)	4b	—	—
Cole [35]	2015 Nov	235	—	—	—	Konig	NC	—	39.6% (93/235)	4	—	—
Aminololama-Shakeri [36]	2016 Jan	39	55	—	28.2% Type a/b 71.8% Type c/d	UCD	NC&CE	—	100% (39/39)	CS	—	90 vs. 33
He [37]	2016 Feb	212	48	68%	24.5% Type a/b 75.5% Type c/d	Konig	NC	8	69.2% (306/442)	4a	—	124 vs. 48
Jung [38]	2017 Nov	30	—	—	—	ZumaTek	NC	—	20.6% (7/34)	4	Kappa = 0.3, fair no experience	—
Wienbeck [39]	2017 Dec	59	67.8	32%	36.9% Type a/b 63.1% Type c/d	Konig	NC	7.2	16.1% (18/112)	3	ICC = 0.87, excellent	—
Uhlig [40]	2018 Feb	31	56.5	38.7%	100% Type c/d	Konig	NC	8.8	—	3	1 year of experience	48.17 vs. 0.3 (2')
Liu [41]	2018 Aug	160	47	—	14.5% Type a/b 85.5% Type c/d	Konig	NC&CE	26.1	—	4b	Kappa = 0.768, substantial	57.38 vs. 15.43 (3')
Uhlig [42]	2018 Aug	35	57.9	37.1%	100% Type c/d	Konig	NC	11.6	—	3	3/5 years of experience	—
Wienbeck [43]	2018 Sep	41	57.9	36.6%	63.4% Type c 36.6% Type d	Konig	NC	17.6	1.2% (1/81)	3	ICC = 0.75, excellent	—
Liu [44]	2018 Nov	80	47	—	90% Type c 10% Type d	Konig	NC	5.85	23% (23/100)	3	2 years of experience	—
Uhlig [45]	2019 Jun	49	57.9	34.7%	69.4% Type c 30.6% Type d	Konig	NC	11.7	—	4b	ICC = 0.74, good	72 vs. 43
Kang [46]	2020 Oct	84	46.5	71.4%	—	Konig	NC&CE	5.9	—	3	ICC = 0.76, excellent	—
							NC&CE	11.7	56% (47/84)	POM	2 years of experience	≥ 93.57 vs. <93.57

CBBCT cone-beam breast computed tomography, MG mammography, NC non-contrast, CE contrast-enhanced, MGD mean glandular dose, μ Ca microcalcifications, Δ CT relative enhancement of CT value, B/M benign or malign, POM probability of malignancy, CS conspicuity score, ICC intraclass correlation coefficient

Table 2 Diagnostic accuracy of NC-CBBCT vs. other modalities

Author	Year		MG	US	DBT	DCE-MRI
Belair [32]	2012 Nov	NC-CBBCT (N/A)	Sen		<	
			Spe		<	
			AUC		—	
Zuley [33]	2013 Dec	NC-CBBCT (N/A)	Sen		—	—
			Spe		—	—
			AUC		<	<
Zhao [34]	2015 Jan	NC-CBBCT (N/A)	Sen	>		
			Spe	>		
			AUC	>		
Cole [35]	2015 Nov	NC-CBBCT (N/A)	Sen	≈		
			Spe	≈		
			AUC	≈		
He [37]	2016 Feb	NC-CBBCT (All)	Sen	>	>	
			Spe	>	<	
			AUC	>	>	
		NC-CBBCT (Dense)	Sen	>	>	
			Spe	>	<	
			AUC	>	>	
		NC-CBBCT (All)	Sen	>/>		
			Spe	</<		
			AUC	</<		
Wienbeck [39]	2017 Dec	NC-CBBCT (Nondense)	Sen	>		
			Spe	≈		
			AUC	≈		
		NC-CBBCT (Dense)	Sen	>		
			Spe	<		
			AUC	<		
		NC-CBBCT (Dense)	Sen	>		
			Spe	=		
			AUC	>		
Liu [44]	2018 Nov	NC-CBBCT (Dense)	Sen	>		
			Spe	=		
			AUC	>		

CBBCT cone-beam breast computed tomography, *MG* mammography, *US* ultrasound, *DBT* digital breast tomosynthesis, *DCE-MRI* dynamic contrast-enhanced magnetic resonance imaging, *NC* non-contrast, *N/A* not available, *Sen* sensitivity, *Spe* specificity, *AUC* area under the curve

>: greater than with statistical significance, <: less than with statistical significance, ≈: numerically greater or less than but without statistical significance, =: numerically equal to, —: not available