Supplementary Table 1 Overview of the recently published reports on the diagnosis of coronavirus disease 2019 disease using chest X-ray and chest computed tomography

S. No	Ref.	Type of modality	Population size	Major findings
1	Diletta Cozzi *et al*[70], 2020	Chest X-ray	n= 234; 65.4% male; 34.6% female	About 62.8% of the patients showed GGO. Baseline CXR sensitivity was estimated to be 68.1%
2	*Aditya Borakati *et al*[71], 2020	Chest X-ray and Chest CT	n=1862; Chest X-ray positive: n=305 CT positive: n=162	The sensitivity and specificity of CXR and CT for COVID-19 diagnosis were 56 and 60%, and 85% and 50% respectively. CT has substantially improved diagnostic performance over CXR in COVID-19
3	*Rabab Yasin *et al*[72], 2020	Chest X-ray	n=350	In abnormal CXR, consolidation opacities were the most common finding seen in the patients, and the least were GGO which in turn suggests that radiographic findings are very good predictors for assessing the course of COVID-19 disease
4	Liqa A. Rousan *et al*[30], 2020	Chest X-ray	n=88; 43.2% male; 56.8% female	The most common finding on CXR was peripheral GGO. 50% of patients with COVID-19 have abnormal CXR which can be used for follow-up in patients with COVID-19
5	Stephanie. *et al*[31], 2020	Chest X-ray and Chest CT	n=508; 53% male; 47% female	The most common CXR finding was IA (interstitial and airspace) pattern. CXR sensitivity in COVID-19 detection increases with time, and serial CXR of patients confirmed

				positive for COVID-19 has accuracy approaching that of chest CT
6	Terrence C. H. Hui *et al*[36], 2020	Chest X-ray	n=109; 53.21% male; 46.78 female	40 patients had abnormal initial CXR patterns of which GGO was the most common. CXR severity is correlated with known laboratory markers of disease such as higher LDH, higher CRP, and lower lymphocyte count
7	Danielle Toussie *et al*[73], 2020	Chest X-ray	n=338; 62% male; 38% female	CXR score of 3 or more was an independent predictor of intubation in hospitalized patients. Hence, the CXR severity score was predictive of risk
8	Satyanand Sathi *et al*[74], 2021	Chest X-ray	n=120; 62% male; 38 % female.	The most common CXR finding was GGO. Baseline CXR showed a sensitivity of 63.3%. The study findings suggested that the Radiological Assessment of Lung Edema (RALE) score can quantify the extent of COVID-19 and can predict the prognosis of patients
9	Karuna M. Das *et al*[32], 2021	Chest X-ray and Chest CT	n=56; 59% male; 41% female	About 19.6% of patients had abnormal CXR findings majorly GGO; On chest CT, and 46.4% of patients had abnormal CT findings including combined GGO and consolidation. Chest CT detected a combination of lung abnormalities that were not observed on CXR. However, these additional CT findings did not affect patient management. Therefore, CT is not clinically indicated for

				the initial evaluation of mild to moderately symptomatic pediatric patients with COVID-19 pneumonia
10	Tao Ai *et al*[24], 2020	Chest CT	n=1014; 46% male; 54% female	Patients confirmed with COVID-19 positive were 59% and 88% for RT-PCR and chest CT respectively which infers that chest CT has a high sensitivity for diagnosis and severity of COVID-19 disease
11	Wei-Jie Guan *et al*[7], 2020	Chest CT	n=1099; 58.1% male; 41.9% female	The major findings of chest CT were GGO. It complements the diagnosis and severity of COVID-19 with RT-PCR However, patients who did not have prominent clinical symptoms might end up with the complicated diagnosis
12	Xiao-Wei Xu *et al*[75], 2020	Chest CT	n=62; 56% male; 44% female	The majority of patients showed characteristic bilateral GGO on chest CT
13	Ho Yuen Frank Wong *et al*[76], 2020	Chest X Radiography and Chest CT along with RT-PCR	n=64 40.62% male; 59.37% female	About 90.62% of patients had initial positive findings with RT-PCR, 68.75% of patients had abnormal findings at baseline CXR, 59.37% of patients had initial positive findings with RT-PCR testing and abnormal findings at baseline CXR. 9.37% of patients showed abnormalities at CXR before eventually testing positive with RT-PCR. Chest CT complements the diagnosis & severity of COVID-19 with RT-PCR

14	Adam Bernheim *et al*[77], 2020	Chest CT	n=121; 50% male; 50% female	Characteristic bilateral GGO was majorly observed on CT. Sensitivity and diagnosis of CT are related to the infection time course and its severity
15	Damiano Caruso *et al*[78], 2020	Chest CT	n=158; 52.53% male and 47.46% female	A subgroup of RT-PCR-positive patients showed the characteristic bilateral GGO with CT in 100%. Chest CT sensitivity was high (97%) but with lower specificity (56%)
16	Feng Pan *et al*[79], 2020	Chest CT	n=21; 28.57% male; 71.42% female	Stage 1**:** GGO in (75%) patients; Stage 2**:** Increased crazy-paving pattern in (53%) patients; Stage 3**:** Consolidation in (91%) patients with high CT score; Stage 4: Gradual resolution of consolidation in (75%) patients with decreased CT score without crazy-paving pattern
17	*Xingzhi Xie *et al*[80], 2020	Chest CT	n=167	RT-PCR and CT results were concordant for COVID-19 infection in 93% of subjects in which GGO was the most common CT findings
18	Xun Ding *et al*[81], 2020	Chest CT	n=112; 45.54% male; 54.46% female	Characteristic GGOs appearance and CT score were gradually increased from stage 1 to stage 2 and thereafter remained high until stage 6 in most CT scans. Thin-section CT could provide a semi-quantitative analysis of pulmonary damage severity in pneumonia cases
19	Ruichao Niu *et al*[33], 2020	Chest CT	n=361; 53.18% male; 46.81% female	Characteristics GGOs appearances were observed which further confirmed COVID-19 infection. Age-dependent

				variations in CT features were observed. Also, the CT features are associated with clinical manifestation and also with patient prognosis
20	Ying Xiong *et al*[37], 2020	Chest CT	n=42; 59.52% male; 40.47% female	About 83% of patients exhibited a progressive CT feature during the early stage from the onset. Follow-up CT findings showed characteristics of GGO which were correlated with biochemical markers and severity of COVID-19 infection
21	Chaolin Huang *et al*[82], 2021	Chest CT	n=1733; 52% male; 48% female.	A considerable proportion of patients showed characteristic bilateral GGO on chest CT
22	Kristof De Smet *et al*[35], 2021	Chest CT	n=859 case group; 51.57% male; 48.43% female n=1138 control group; 51.66% male; 48.33% female.	Chest CT with Coronavirus Disease 2019 Reporting and Data System (CORADS) confirmed COVID-19 infection in symptomatic and asymptomatic patients with a sensitivity of 89% and 45% of patients respectively. Although it had good diagnostic performance in symptomatic individuals and insufficient to justify its use as a first-line screening approach in asymptomatic subjects.

*****=Gender details not available; **RT PCR**=Real Time Quantitative PCR; **CXR**=Chest X radiography; **CT**=Computed Tomography; **GGO**=Ground Glass Opacities

Table 2: List of the recently published reports on the LDRT for management of COVID-19 disease

S. No	Ref.	Type of study/Sample size	Range of dose (X-ray)	Major findings
Pre-Clinical studies				
1	Jackson *et al*[41], 2022	Pre-clinical efficacy study in C57BL/6 female mice	Bleomycin sulfate at day 0 followed by 0.5, 1.0, and 1.5 Gy or sham on day 3	Bleomycin-induced pneumonitis in mice model, irradiated with 1 Gy showed significant recovery (98%) and less severity concerning histopathological lung alterations
Clinical studies				
2	Papachristofilou *et al*[83], 2021	Randomized double-blind study; COVID-19 positive patients (n=22); Whole-lung LDRT group: (male n=10, female n=1); Sham-RT group (male n=7, female n=4); Age: 54-84 y	A single dose of 1.0 Gy	Endpoints such as overall survival (28 days) and, ventilator-free days (0-13 days) were identical (63.6%) in subjects with and without LDRT
3	Hess *et al*[42], 2021	Clinical trials; Total subjects n=40; COVID-19 positive patients with pneumonia (n=20) of age: 53-85 y with and without LDRT (n=20) of age: 49-88 y	Dexamethasone and/or remdesvir treatment followed by 1.5 Gy	Intubation decreased from 86-68% in patients who underwent LDRT than the drug alone. It was also supported by lowered CRP and CK biomarkers thus, they were found to be consistent with clinical findings with equivalent radiographic findings

4	Hess *et al*[46], 2021	Clinical trials: Total; COVID-19 positive patients (n=10), controls (n=10)	A single dose of 1.5 Gy	Patients with COVID-19-related pneumonia who underwent LDRT showed a significant reduction in numerous hematologic, cardiac, hepatic, and inflammatory markers. Intubation rates, hospital duration and discharge, oxygen supplementation fever duration, and radiograph features were less in patients who underwent LDRT
5	Mousavi Darzikolaee *et al*[84], 2021	Controlled clinical trial: Total subjects (n=22); out of which COVID-19 positive patients with pneumonia (n=11) with patients in control group (n=11)	A single dose of 1.0 Gy	Overall survival for 28 days was higher (32%) in the patients who underwent LDRT than that of control (11%)
6	Ganesan *et al*[43], 2021	Ongoing phase 2 clinical trial: COVID-19 positive pneumonia patients (n=25) i.e., n=10 patients in first phase and n=15 patients in second phase; males (n=16), females (n=9) and n=8 controls; age: 40-80 y	A single dose of 0.5 Gy	Significant improvement in oxygenation SF ratio, between pre-RT and day 2, day 3, and day 7 post-RT and oxygen demand to hospital discharge with a shorter median time (6 days) was observed in 88% within 10 days post LDRT. The deterioration had been seen in three patients and they died

7	Algara *et al*[85], 2020	Clinical trials-four studies (US, Spain (2 studies), Iran): Total (n=10) subjects in the first phase and total (n=96) subjects in the second phase out of which 64 patients and 32 controls	A single fraction of 0.5 Gy or two fractions of 1 Gy after 48-72 hrs.	Pro-inflammatory markers such as IL-1, IL-2 Il-6 IL-8, IL-10 TGF-α, TGF-β (removed italics) and oxidative marker PON-1 have been under evaluation in patients at different days post LDRT. The study involves two phases: the exploratory phase and the non-randomized comparative phase. Subjects with an improvement in PaFiO2/SaFi02 parameter up to 20% to be included for the second phase and then inflammatory parameters like CRP, D-dimer, ferritin, and LDH to be measured.
8	Hamid Ghaznavi *et al*[86], 2021	Clinical trials: COVID-19 positive patients (n=5), age: 64-96 y)	Single dose of 1.5 Gy	LDRT was effective in 80% of patients based on blood parameters evaluated
9	Ameri *et al*[45], 2020	Multi-centric prospective trial: COVID-19 positive patients (n=5), males (n=4), females (n=1); age: 60-84 y	A single dose of 0.5 Gy	No radiation toxicity was observed; 80% of patients showed improvement in the first few days after irradiation
10	Ameri *et al*[87], 2021	Clinical trial: COVID-19 positive patients (n=10), males (n=8), females (n=2); age: 60-87 y	A single dose of 0.5 Gy (n=6) and a single dose of 1 Gy (n=4).	Increased blood oxygen level and clinical recovery were observed in 63.6 and 55.5% of patients, respectively. LDRT with 0.5 or 1 Gy is feasible

11	Hess *et al*[88], 2020	7-day interim analysis of clinical trial: COVID-19 positive patients (n=5), male n=1 and female n=4; age: 64-94 y	A single dose of 1.5 Gy	An improved level of SatO2/FiO2 index with 60% free from supplemental oxygen and 80% radiographic improvement about decreased lung inflammation was observed after LDRT. Hospital discharge was earlier in 80% of patients
12	Del Castillo *et al*[89], 2020	Case study: male COVID-19 positive patient (n=1); 64 y	Single dose of 1 Gy	The patient showed improvement in the respiratory system, decreased inflammatory markers, and a shorter hospital stay in ICU
13	Sharma *et al*[44], 2021	Pilot study: COVID-19 positive patients (n=10); age: 38–63 y males	A single dose of 0.7 Gy	No radiation toxicity was observed in these patients with a 90% response rate
14	Lulin Yuan *et al*[90], 2020	Clinical trial: nonCOVID validation patients (n=12), males (n=6) and females (n=6)	A single dose of 0.5 Gy	LDRT reduces the hyper-inflammatory reaction in the lungs

*=Patient clinical details not available; **LDRT**=Low-Dose Radiation Therapy; **SpO2/FiO2**=Oxygen saturation to a fraction of inspired oxygen ratio; **CRP**=C-Reactive Protein; **CK**=Creatine Kinase; **Gy**=Gra

References

7 **Guan WJ**, Ni ZY, Hu Y, Liang WH, Ou CQ, He JX, Liu L, Shan H, Lei CL, Hui DSC, Du B, Li LJ, Zeng G, Yuen KY, Chen RC, Tang CL, Wang T, Chen PY, Xiang J, Li SY, Wang JL, Liang ZJ, Peng YX, Wei L, Liu Y, Hu YH, Peng P, Wang JM, Liu JY, Chen Z, Li G, Zheng ZJ, Qiu SQ, Luo J, Ye CJ, Zhu SY, Zhong NS; China Medical Treatment Expert Group for Covid-19. Clinical Characteristics of Coronavirus Disease 2019 in China. *N Engl J Med* 2020; **382**: 1708-1720 [PMID: 32109013 DOI: 10.1056/NEJMoa2002032]

24 **Ai T**, Yang Z, Hou H, Zhan C, Chen C, Lv W, Tao Q, Sun Z, Xia L. Correlation of Chest CT and RT-PCR Testing for Coronavirus Disease 2019 (COVID-19) in China: A Report of 1014 Cases. *Radiology* 2020; **296**: E32-E40 [PMID: 32101510 DOI: 10.1148/radiol.2020200642]

30 **Rousan LA**, Elobeid E, Karrar M, Khader Y. Chest x-ray findings and temporal lung changes in patients with COVID-19 pneumonia. *BMC Pulm Med* 2020; **20**: 245 [PMID: 32933519 DOI: 10.1186/s12890-020-01286-5]

31 **Stephanie S**, Shum T, Cleveland H, Challa SR, Herring A, Jacobson FL, Hatabu H, Byrne SC, Shashi K, Araki T, Hernandez JA, White CS, Hossain R, Hunsaker AR, Hammer MM. Determinants of Chest X-Ray Sensitivity for COVID- 19: A Multi-Institutional Study in the United States. *Radiol Cardiothorac Imaging* 2020; **2**: e200337 [PMID: 33778628 DOI: 10.1148/ryct.2020200337]

32 **Das KM**, Alkoteesh JA, Al Kaabi J, Al Mansoori T, Winant AJ, Singh R, Paraswani R, Syed R, Sharif EM, Balhaj GB, Lee EY. Comparison of chest radiography and chest CT for evaluation of pediatric COVID-19 pneumonia: Does CT add diagnostic value? *Pediatr Pulmonol* 2021; **56**: 1409-1418 [PMID: 33631061 DOI: 10.1002/ppul.25313]

33 **Niu R**, Ye S, Li Y, Ma H, Xie X, Hu S, Huang X, Ou Y, Chen J. Chest CT features associated with the clinical characteristics of patients with COVID-19 pneumonia. *Ann Med* 2021; **53**: 169-180 [PMID: 33426973 DOI: 10.1080/07853890.2020.1851044]

35 **De Smet K**, De Smet D, Ryckaert T, Laridon E, Heremans B, Vandenbulcke R, Demedts I, Bouckaert B, Gryspeerdt S, Martens GA. Diagnostic Performance of Chest CT for SARS-CoV-2 Infection in Individuals with or without COVID-19 Symptoms. *Radiology* 2021; **298**: E30-E37 [PMID: 32776832 DOI: 10.1148/radiol.2020202708]

36 **Hui TCH**, Khoo HW, Young BE, Haja Mohideen SM, Lee YS, Lim CJ, Leo YS, Kaw GJL, Lye DC, Tan CH. Clinical utility of chest radiography for severe COVID-19. *Quant Imaging Med Surg* 2020; **10**: 1540-1550 [PMID: 32676371 DOI: 10.21037/qims-20-642]

37 **Xiong Y**, Sun D, Liu Y, Fan Y, Zhao L, Li X, Zhu W. Clinical and High-Resolution CT Features of the COVID-19 Infection: Comparison of the Initial and Follow-up Changes. *Invest Radiol* 2020; **55**: 332-339 [PMID: 32134800 DOI: 10.1097/RLI.0000000000000674]

41 **Jackson MR**, Stevenson K, Chahal SK, Curley E, Finney GE, Gutierrez-Quintana R, Onwubiko E, Rupp A, Strathdee K, Williams K, MacLeod MKL, McSharry C, Chalmers AJ. Low-Dose Lung Radiation Therapy for COVID-19 lung disease: A Preclinical Efficacy Study in a Bleomycin Model of Pneumonitis. *Int J Radiat Oncol Biol Phys* 2022; **112**: 197-211 [PMID: 34478832 DOI: 10.1016/j.ijrobp.2021.08.029]

42 **Hess CB**, Nasti TH, Dhere VR, Kleber TJ, Switchenko JM, Buchwald ZS, Stokes WA, Weinberg BD, Rouphael N, Steinberg JP, Godette KD, Murphy DJ, Ahmed R, Curran WJ Jr, Khan MK. Immunomodulatory Low-Dose Whole-Lung Radiation for Patients with Coronavirus Disease 2019-Related Pneumonia. *Int J Radiat Oncol Biol Phys* 2021; **109**: 867-879 [PMID: 33340603 DOI: 10.1016/j.ijrobp.2020.12.011]

43 **Ganesan G**, Ponniah S, Sundaram V, Marimuthu PK, Pitchaikannu V, Chandrasekaran M, Thangarasu J, Kannupaiyan G, Ramamoorthy P, Thangaraj B, Shree Vaishnavi R. Whole lung irradiation as a novel treatment for COVID-19: Interim results of an ongoing phase 2 trial in India. *Radiother Oncol* 2021; **163**: 83-90 [PMID: 34391759 DOI: 10.1016/j.radonc.2021.08.001]

44 **Sharma DN**, Welsh J, Kumar R. Can low-dose radiation therapy reduce the risk of mucormycosis in COVID-19 patients? *J Cancer Res Ther* 2021; **17**: 1294-1296 [PMID: 34916356 DOI: 10.4103/jcrt.JCRT_2011_21]

45 **Ameri A**, Rahnama N, Bozorgmehr R, Mokhtari M, Farahbakhsh M, Nabavi M, Shoaei SD, Izadi H, Yousefi Kashi AS, Dehbaneh HS, Taghizadeh-Hesary F. Low-Dose Whole-Lung Irradiation for COVID-19 Pneumonia: Short Course Results. *Int J Radiat Oncol Biol Phys* 2020; **108**: 1134-1139 [PMID: 32707264 DOI: 10.1016/j.ijrobp.2020.07.026]

46 **Hess CB**, Eng TY, Nasti TH, Dhere VR, Kleber TJ, Switchenko JM, Weinberg BD, Rouphael N, Tian S, Rudra S, Taverna LS, Daisson AP, Ahmed R, Khan MK. Whole-lung low-dose radiation

therapy (LD-RT) for non-intubated oxygen-dependent patients with COVID-19-related pneumonia receiving dexamethasone and/or remdesevir. *Radiother Oncol* 2021; **165**: 20-31 [PMID: 34653525 DOI: 10.1016/j.radonc.2021.10.003]

70 **Cozzi D**, Albanesi M, Cavigli E, Moroni C, Bindi A, Luvarà S, Lucarini S, Busoni S, Mazzoni LN, Miele V. Chest X-ray in new Coronavirus Disease 2019 (COVID-19) infection: findings and correlation with clinical outcome. *Radiol Med* 2020; **125**: 730-737 [PMID: 32519256 DOI: 10.1007/s11547-020-01232-9]

71 **Borakati A**, Perera A, Johnson J, Sood T. Diagnostic accuracy of X-ray *vs* CT in COVID-19: a propensity-matched database study. *BMJ Open* 2020; **10**: e042946 [PMID: 33158840 DOI: 10.1136/bmjopen-2020-042946]

72 **Yasin R**, Gouda W. Chest X-ray findings monitoring COVID-19 disease course and severity. *EJRNM* 2020; 1-18 [DOI: 10.1186/s43055-020-00296-x]

73 **Toussie D**, Voutsinas N, Finkelstein M, Cedillo MA, Manna S, Maron SZ, Jacobi A, Chung M, Bernheim A, Eber C, Concepcion J, Fayad ZA, Gupta YS. Clinical and Chest Radiography Features Determine Patient Outcomes in Young and Middle-aged Adults with COVID-19. *Radiology* 2020; **297**: E197-E206 [PMID: 32407255 DOI: 10.1148/radiol.2020201754]

74 **Sathi S**, Tiwari R, Verma S, Kumar Garg A, Singh Saini V, Kumar Singh M, Mittal A, Vohra D. Role of Chest X-Ray in Coronavirus Disease and Correlation of Radiological Features with Clinical Outcomes in Indian Patients. *Can J Infect Dis Med Microbiol* 2021; **2021**: 6326947 [PMID: 34630785 DOI: 10.1155/2021/6326947]

75 **Xu XW**, Wu XX, Jiang XG, Xu KJ, Ying LJ, Ma CL, Li SB, Wang HY, Zhang S, Gao HN, Sheng JF, Cai HL, Qiu YQ, Li LJ. Clinical findings in a group of patients infected with the 2019 novel coronavirus (SARS-Cov-2) outside of Wuhan, China: retrospective case series. *BMJ* 2020; **368**: m606 [PMID: 32075786 DOI: 10.1136/bmj.m606]

76 **Wong HYF**, Lam HYS, Fong AH, Leung ST, Chin TW, Lo CSY, Lui MM, Lee JCY, Chiu KW, Chung TW, Lee EYP, Wan EYF, Hung IFN, Lam TPW, Kuo MD, Ng MY. Frequency and Distribution of Chest Radiographic Findings in Patients Positive for COVID-19. *Radiology* 2020; **296**: E72-E78 [PMID: 32216717 DOI: 10.1148/radiol.2020201160]

77 **Bernheim A**, Mei X, Huang M, Yang Y, Fayad ZA, Zhang N, Diao K, Lin B, Zhu X, Li K, Li S, Shan H, Jacobi A, Chung M. Chest CT Findings in Coronavirus Disease-19 (COVID-19): Relationship to Duration of Infection. *Radiology* 2020; **295**: 200463 [PMID: 32077789 DOI: 10.1148/radiol.2020200463]

78 **Caruso D**, Zerunian M, Polici M, Pucciarelli F, Polidori T, Rucci C, Guido G, Bracci B, De Dominicis C, Laghi A. Chest CT Features of COVID-19 in Rome, Italy. *Radiology* 2020; **296**: E79-E85 [PMID: 32243238 DOI: 10.1148/radiol.2020201237]

79 **Pan F**, Ye T, Sun P, Gui S, Liang B, Li L, Zheng D, Wang J, Hesketh RL, Yang L, Zheng C. Time Course of Lung Changes at Chest CT during Recovery from Coronavirus Disease 2019 (COVID-19). *Radiology* 2020; **295**: 715-721 [PMID: 32053470 DOI: 10.1148/radiol.2020200370]

80 **Xie X**, Zhong Z, Zhao W, Zheng C, Wang F, Liu J. Chest CT for Typical Coronavirus Disease 2019 (COVID-19) Pneumonia: Relationship to Negative RT-PCR Testing. *Radiology* 2020; **296**: E41-E45 [PMID: 32049601 DOI: 10.1148/radiol.2020200343]

81 **Ding X**, Xu J, Zhou J, Long Q. Chest CT findings of COVID-19 pneumonia by duration of symptoms. *Eur J Radiol* 2020; **127**: 109009 [PMID: 32325282 DOI: 10.1016/j.ejrad.2020.109009]

82 **Huang C**, Huang L, Wang Y, Li X, Ren L, Gu X, Kang L, Guo L, Liu M, Zhou X, Luo J, Huang Z, Tu S, Zhao Y, Chen L, Xu D, Li Y, Li C, Peng L, Li Y, Xie W, Cui D, Shang L, Fan G, Xu J, Wang G, Wang Y, Zhong J, Wang C, Wang J, Zhang D, Cao B. 6-month consequences of COVID-19 in patients discharged from hospital: a cohort study. *Lancet* 2021; **397**: 220-232 [PMID: 33428867 DOI: 10.1016/S0140-6736(20)32656-8]

83 **Papachristofilou A**, Finazzi T, Blum A, Zehnder T, Zellweger N, Lustenberger J, Bauer T, Dott C, Avcu Y, Kohler G, Zimmermann F, Pargger H, Siegemund M. Low-Dose Radiation Therapy for Severe COVID-19 Pneumonia: A Randomized Double-Blind Study. *Int J Radiat Oncol Biol Phys* 2021; **110**: 1274-1282 [PMID: 33677049 DOI: 10.1016/j.ijrobp.2021.02.054]

84 **Mousavi Darzikolaee N**, Kolahdouzan K, Abtahi H, Kazemizadeh H, Salehi M, Ghalehtaki R, Bayani R, Pestehei SK, Ghazanfari T, Ebrahiminasab F, Salarvand S, Haddad P, Kazemian A, Aghili M. Low-dose whole-lung irradiation in severe COVID-19 pneumonia: a controlled clinical trial. *J Med Radiat Sci* 2021; **68**: 396-406 [PMID: 34416084 DOI: 10.1002/jmrs.542]

85 **Algara M**, Arenas M, Marin J, Vallverdu I, Fernandez-Letón P, Villar J, Fabrer G, Rubio C, Montero A. Low dose anti-inflammatory radiotherapy for the treatment of pneumonia by covid-19: A proposal for a multi-centric prospective trial. *Clin Transl Radiat Oncol* 2020; **24**: 29-33 [PMID: 32613089 DOI: 10.1016/j.ctro.2020.06.005]

86 **Ghaznavi H**. Effectiveness of low-dose radiation therapy to improve mortality of COVID-19. *J Cancer Res Clin Oncol* 2021; **147**: 2621-2624 [PMID: 34219180 DOI: 10.1007/s00432-021-03707-2]

87 **Ameri A**, Ameri P, Rahnama N, Mokhtari M, Sedaghat M, Hadavand F, Bozorgmehr R, Haghighi M, Taghizadeh-Hesary F. Low-Dose Whole-Lung Irradiation for COVID-19 Pneumonia: Final Results of a Pilot Study. *Int J Radiat Oncol Biol Phys* 2021; **109**: 859-866 [PMID: 33278503 DOI: 10.1016/j.ijrobp.2020.11.065]

88 **Hess CB**, Buchwald ZS, Stokes W, Nasti TH, Switchenko JM, Weinberg BD, Steinberg JP, Godette KD, Murphy D, Ahmed R, Curran WJ Jr, Khan MK. Low-dose whole-lung radiation for COVID-19 pneumonia: Planned day 7 interim analysis of a registered clinical trial. *Cancer* 2020; **126**: 5109-5113 [PMID: 32986274 DOI: 10.1002/cncr.33130]

89 **Del Castillo R**, Martinez D, Sarria GJ, Pinillos L, Garcia B, Castillo L, Carhuactocto A, Giordano FA, Sarria GR. Low-dose radiotherapy for COVID-19 pneumonia treatment: case report, procedure, and literature review. *Strahlenther Onkol* 2020; **196**: 1086-1093 [PMID: 32816059 DOI: 10.1007/s00066-020-01675-z]

90 **Yuan L**, Kim S, Palta J, Hagan MP. An efficient planning technique for low dose whole lung radiation therapy for covid-19 pandemic patients. *Phys Imaging Radiat Oncol* 2020; **16**: 85-88 [PMID: 33072896 DOI: 10.1016/j.phro.2020.10.004]