

## <MOLDCARE Research Paper List> Radiosurgery

Year/Month	Magazine, Publication, Media or Event	Title	Authors	Part of the Body / Case	Equipment / Treatment Method	Patient Positioning Device set up used during Research
2001/11	Radiation Oncology Biology Physics Volume 51	<a href="#">Hypofractionated Stereotactic Radiotherapy (HSRT) alone without whole brain irradiation for solitary and oligo brain metastatic patients using non-invasive fixation of skull</a>	H. Aoyama, H. Shirato, R. Onimaru, K. Miyasaka	Brain	Hypofractionated Stereotactic Radiotherapy	<b>Moldcare</b> + Thermoplastic mask
2003/09	Radiotherapy and Oncology 68.2(2003):137-148. Web	<a href="#">Set-up improvement in head and neck radiotherapy using a 3D off-lineEPID-based correction protocol and a customised head and neck support</a>	Emile N.J. Th. van Lin, Lisette van der Vight, Henk Huizenga, Johannes H.A.M. Kaanders, Andries G. Visser	Head & Neck	IMRT, 3D-CRT	<b>Moldcare</b> + Orfit thermoplastic mask
2005/06	Radiotherapy and Oncology 76(2)	<a href="#">510 Head and Neck IMRT always need better precision</a>	R. Garcia, M. Alfonsi, V. Bodez, L. VialInstitut Sainte Catherine, Avignon, France	Head & Neck	IMRT	<b>Moldcare</b>
2007/12	Radiation Oncology 2	<a href="#">Dosimetric comparison between coplanar and non coplanar field radiotherapy for ethmoid sinus cancer</a>	Antoine Serre, Katia Idri, Pascal Fenoglio, Norbert Ailleres, Lore Santoro, Claire Lemanski, Renaud Garrel, Marc Makeieff, Ali Allaw, Jean-Bernard Dubois & David Azria	Ethmoid Sinus	IMRT	<b>Moldcare</b> + 5 point thermoplastic mask
2008/02	International Journal of Radiation Oncology Biology Physics Volume 70, Issue 2	<a href="#">L-[METHYL-11C] Methionine Positron Emission Tomography for Target Delineation in Malignant Gliomas: Impact on Results of Carbon Ion Radiotherapy</a>	Pawnee Mahasittiwat, Jun-etsu Mizoe, Azusa Hasegawa, Hiroyuki Ishikawa, Kyosan Yoshikawa, Hideyuki Mizuno, Takeshi Yanagi, Ryou Takagi, Pittayapoom Pattaranutaporn, Hirohiko Tsujii	Brain	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter low-temperature thermoplastic shell
2008/06	Journal of Applied Clinical Medical Physics Volume 9, Issue 3	<a href="#">Clinical experience of the importance of daily portal imaging for head and neck IMRT treatments</a>	Laurence E Court, Luciant Wolfsberger, Aaron M Allen, Steven James, Roy B Tishler	Head & Neck	IMRT	<b>Moldcare</b> + Civco Head-Neck-shoulder thermoplastic immobilization system S-Type
2010/09	Medical Physics	<a href="#">Characterization of a real-time surface image-guided stereotactic positioning system</a>	Jean L. Peng, Darren Kahler, Jonathan G. Li, Sanjiv Samant, Guanghua Yan, Robert Amdur, and Chihray Liu	Head & Neck	Surface Image-Guided Stereotactic Positioning System	<b>Moldcare</b>
2010/10	Radiation Oncology 5	<a href="#">Carbon ion radiotherapy for basal cell adenocarcinoma of the head and neck: preliminary report of six cases and review of the literature</a>	Keiichi Jingu, Azusa Hasegawa, Jun-Etsu Mizo, Hiroki Bessho, Takamichi Morikawa, Hiroshi Tsuji, Hirohiko Tsujii & Tadashi Kamada	Tongue, Ethmoid Sinus, Temporal Skin, Ear and Buccal	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter low-temperature thermoplastic shell
2011/04	Journal of Applied Clinical Medical Physics Volume 12, Issue 3	<a href="#">Dosimetric consequences of rotational setup errors with direct simulation in a treatment planning system for fractionated stereotactic radiotherapy</a>	Jean L. Peng, Chihray Liu, Yu Chen, Robert J. Amdur, Kenneth Vanek, Jonathan G. Li	General Head & Neck	Fractionated Stereotactic Radiotherapy, IMRT	<b>Moldcare</b> + Bionix thermoplastic mask
2011/06	International Journal of Radiation Oncology Biology Physics Volume 83, Issue 1	<a href="#">Experience With Carbon Ion Radiotherapy for WHO Grade2 Diffuse Astrocytomas</a>	Azusa Hasegawa, Jun-Etsu Mizoe, Hirohiko Tsujii, Tadashi Kamada, Keiichi Jingu, Yasuo Iwadate, Youichi Nakazato, Masao Matsutani, Kintomo Takakura, Organizing Committee of the Central Nervous System Tumor Working Group	Brain	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter low-temperature thermoplastic shell
2012/04	International Journal of Radiation Oncology Biology Physics Volume 82, Issue 5	<a href="#">Carbon Ion Radiation Therapy Improves the Prognosis of Unresectable Adult Bone and Soft-Tissue Sarcoma of the Head and Neck</a>	Keiichi Jingu, Hirohiko Tsujii, Jun-Etsu Mizoe, Azusa Hasegawa, Hiroki Bessho, Ryo Takagi, Takamichi Morikawa, Morio Tonogi, Hiroshi Tsuji, Tadashi Kamada, Shogo Yamada, Organizing Committee for the Working Group for Head-and-Neck Cancer	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter low-temperature thermoplastic shell
2014/04	Radiation Oncology 9, 92	<a href="#">Effects of the dose-volume relationship on and risk factors for maxillary osteoradionecrosis after carbon ion radiotherapy</a>	Go Sasahara, Masashi Koto, Hiroaki Ikawa, Azusa Hasegawa, Ryo Takagi, Yoshitaka Okamoto & Tadashi Kamada	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter low-temperature thermoplastic shell
2014/04	Radiation Oncology 9	<a href="#">Effects of the dose-volume relationship on and risk factors for maxillary osteoradionecrosis after carbon ion radiotherapy</a>	Go Sasahara, Masashi Koto, Hiroaki Ikawa, Azusa Hasegawa, Ryo Takagi, Yoshitaka Okamoto & Tadashi Kamada	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter thermoplastic mask
2014/08	Translational Cancer Research Vol 3, No 4	<a href="#">Initial clinical experience with surface image guided (SIG) radiosurgery for trigeminal neuralgia</a>	Anthony J. Paravati, Ryan Manger, Jasmine D. Nguyen, Sofia Olivares, Gwe-Ya Kim, Kevin T. Murphy	Trigeminal Neuralgia	SGRT	<b>Moldcare</b> + CIVCO Type-S Voard + Thermoplastic open faced Mask
2014/10	Radiotherapy and Oncology 113 (1)	<a href="#">Feasibility of carbon ion radiotherapy for locally advanced sinonasal adenocarcinoma</a>	Masashi Koto, Azusa Hasegawa, Ryo Takagi, Go Sasahara, Hiroaki Ikawa, Jun-etsu Mizoe, Keiichi Jingu, Hirohiko Tsujii, Tadashi, Kamada, Yoshitaka Okamoto, Organizing Committee for the Working Group for Head-and-Neck Cancer	Sinonasal	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter low-temperature thermoplastic shell
2014/12		<a href="#">Neck Pain Due To Undetected Metastatic Lung Adenocarcinoma</a>	Llumiguano, Carlos, Arregui, Elena, Borrás, José Maria, Villa, José Carlos, Gonzalez, Lucia	Head & Neck		<b>Moldcare</b>
2015/03	écho Vol.35 P27	<a href="#">Le traitement du cancer de l'ORL</a>	Marie-Ève Bérubé t.r.o. et Anne-Julie Rancourt-Poulin t.r.o.	Ear, Nose and Throat		<b>Moldcare</b>
2015/09	Journal of Applied Clinical Medical Physics Volume 16, Issue 5	<a href="#">Utilization of optical tracking to assess efficacy of intracranial immobilization techniques in proton therapy</a>	Wen C. His, Andries N. Schreuder, Omar Zeidan	Brain	Proton Therapy	<b>Moldcare</b> + Qfix Aqua-plastic masks, Base-of-Skull (BoS) headframe-supine
2015/10	PLOS ONE	<a href="#">Prediction of Acute Radiation Mucositis using an Oral Mucosal Dose Surface Model in Carbon Ion Radiotherapy for Head and Neck Tumors</a>	Atsushi Musha ,Hirofumi Shimada, Katsuyuki Shirai, Jun-ichi Saitoh, Satoshi Yokoo, Kazuaki Chikamatsu, Tatsuya Ohno, Takashi Nakano	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter thermoplastic shell
2016/04	Journal of Medical Radiation Sciences	<a href="#">Medical Imaging Challenges of Today</a>	Denise Elliott, Lindsay Batty-Smith	Head & Neck	VMAT	<b>Moldcare</b>
2016/10	Anticancer Research October 2016, 36 (10)	<a href="#">Radiation-induced Parotid Gland Atrophy in Patients with Head and Neck Cancer After Carbon-ion Radiotherapy</a>	Takamichi Morikawa, Masashi Koto, Azusa Hasegawa, Ryo Takagi, Akira Fujikawa, Hiroshi Tsuji, Takahiko Shibahara and Tadashi Kamada	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter low-temperature thermoplastic shell
2016/10	Journal of Medical Case Reports 10	<a href="#">Oral mucosal melanoma treated with carbon ion radiotherapy: a case report</a>	Atsushi Musha, Jun-ichi Saitoh, Katsuyuki Shirai, Satoshi Yokoo, Tatsuya Ohno & Takashi Nakano	Oral Mucosal Melanoma	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter thermoplastic shell
2017/04	Radiation Oncology 12	<a href="#">Setup errors in patients with head-neck cancer (HNC), treated using the Intensity Modulated Radiation Therapy (IMRT) technique: how it influences the customised immobilisation systems, patient's pain and anxiety</a>	Massimiliano Contesini, Monica Guberti, Roberta Saccani, Luca Braglia, Cinzia Iotti, Andrea Botti, Emilio Abbati & Marina Iemmi	Head & Neck	TomoTherapy® / IMRT	<b>Moldcare (HN 1)</b> + Qfix Acquaplast RT® Fibreplast™ 5 point Thermoplastic mask

Remarks: Descriptions on this list are based on the original papers.

2017/07	Radiotherapy and Oncology 123 (2017)	<a href="#">Supine craniospinal irradiation in pediatric patients by proton pencilbeam scanning</a>	Paolo Farace, Nicola Bizzocchi, Roberto Righetto, Francesco Fellin, Francesco Fracchiolla, Stefano Lorentini, Lamberto Widesott, Carlo Algranati, Barbara Rombi, Sabina Vennarini, Maurizio Amichetti, Marco Schwarz	Brain	Proton Pencil Beam Scanning	<b>Moldcare</b> + Qfix kVue Standard Insert + Civco Type-S Overlay Proton + Civco MDA Proton Type S-Mask
2017/07	Journal of Applied Clinical Medical Physics	<a href="#">Practical considerations of linear accelerator - based frameless extracranial radiosurgery for treatment of occipital neuralgia for nonsurgical candidates</a>	Travis R. Denton, Lisa B.E. Shields, Jonathan N. Howe, Todd S. Shanks and Aaron C. Spalding	Occipital	SRS	<b>Moldcare</b> + Frameless SRS Mask Set Extended, Brainlab
2017/11	Journal of Medical Physics Volume 42, Issue 5	<a href="#">Evaluation of Intrafractional Setup Errors in Frameless SRS Computed Using Optical Surface Monitoring System &amp; CBCT</a>	P. T. Patwe, V. Mhatre, A. Nachankar, P. Dandekar	Head & Neck	SRS	<b>Moldcare</b> + Q-fix Aquaplast mask + Portrait Head & Neck base plate + Silverman head support
2018/01	Journal of Applied Clinical Medical Physics Volume 19, Issue 1	<a href="#">Minimal mask immobilization with optical surface guidance for head and neck radiotherapy</a>	Bo Zhao, Genevieve Maquilan, Steve Jiang, David L. Schwartz	Head & Neck	Vision RT AlignRT / SGRT	<b>Moldcare</b> + Qfix RT-1876KSDGLF openview thermoplastic mask
2018/01	Radiology and Oncology Volume 52	<a href="#">An evaluation of the ICON® mask fixation: curing characteristics of the thermoplastic fixation and implications for patient workflow</a>	Samendra Prasad, Matthew Podgorsak, Robert Plunkett, Dheerendra Prasad	Head & Neck	Elekta Leksell Gamma Knife ICON / Hypo-fractionation	<b>Moldcare</b> + Elekta ICON Nanor® mask
2018/05	Radiation & Oncology Volume 127, Issue 3	<a href="#">Evaluation of a magnetic resonance guided linear accelerator for stereotactic radiosurgery treatment</a>	Ning Wen,a, Joshua Kim, Anthony Doemer, Carri Glide-Hurst, Indrin J. Chetty, Chang Liu, Eric Laugeman, Ilma Xhaferllari, Akila Kumarasiri, James Victoria, Maria Bellon, Steve Kalkanis, M. Salim Siddiqui, and Benjamin Movsas	Head & Neck	ViewRay MRIdian Linac system / MR-Linac	<b>Moldcare</b> + thermoplastic mask with standard head rest
2018/09	Frontiers in Oncology 04	<a href="#">Comparison of Skull Motions in Six Degrees of Freedom Between Two Head Supports During Frameless Radiosurgery by CyberKnife</a>	Chen-Lin Kang, Shyh-Chang Liu, Jui-Chu Wang, Kuan-Cho Liao, Yu-Jie Huang, Fu-Min Fang, Tsung-I Liao, Kuo-Jung Juan, Chun-Chieh Huang	Head & Neck	Accuray CyberKnife M6 system	<b>Moldcare</b> + CIVCO U-frame mask + Silverman head support
2019/02	Radiation Oncology 14	<a href="#">A step towards international prospective trials in carbon ion radiotherapy: investigation of factors influencing dose distribution in the facilities in operation based on a case of skull base chordoma</a>	G. Vogin, A. Wambersie, M. Koto, T. Ohno, M. Uhl, P. Fossati & J. Balosso on behalf of ULICE WP2 working group	Skull	Carbon Ion Radiotherapy	<b>Japan - Moldcare</b> + 3mm non-perf thermoplastic mask+vac Bag for body, Germany- 3pt mask+ standard head support+dental splint
2019/07	Radiotherapy and Oncology Volume 136	<a href="#">Feasibility of Re-irradiation using carbon ions for recurrent head and neck malignancies after carbon-ion radiotherapy</a>	Kazuhiko Hayashi, Masashi Koto, Hiroaki Ikawa, Yasuhiro Hagiwara, Hiroshi Tsuji, Kazuhiko Ogawa, Tadashi Kamada	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter thermoplastic mask
2019/05	10.7759/cureus.4637	<a href="#">Clinical Outcomes of Spatially Fractionated GRID Radiotherapy in the Treatment of Bulky Tumors of the Head and Neck</a>	J. Isabelle Choi, Janeen Daniels, Dane Cohen, Ying Li, Chul S. Ha, Tony Y. Eng	Head & Neck	IMRT	<b>Moldcare</b> + Orfit head and neck mask
2019/12	Radiotherapy and Oncology Volume 141	<a href="#">Dosimetric parameters predictive of nasolacrimal duct obstruction after carbon-ion radiotherapy for head and neck carcinoma</a>	Nobuteru Kubo, Yoshiki Kubota, Hidemasa Kawamura, Takahiro Oike, Makoto Sakai, Takuya Kumazawa, Yuhei Miyasaka, Shohei Okazaki, Daijiro Kobayashi, Hiro Sato, Tatsuji Mizukami, Atsushi Mushi, Katsuyuki Shirai, Jun-ichi Saitoh, Satoshi Yokoo, Kazuaki Chikamatsu, Tatsuya Ohno, Takashi Nakano	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter thermoplastic shells+ mouth piece
2020/07	2020 AAPM-COMP ePoster	<a href="#">Assessing Improvement in Setup Reproducibility for Head and Neck Patients Following 2 Cycles of Process Improvement</a>	A Heikal, B Aboughoche, M Brennan, H Warkentin, Cross Cancer Institute, Edmonton, AB, Canada	Head & Neck	IGRT by Cone Beam CT	<b>Moldcare</b> or standard headrest
2020/08	Journal of Applied Clinical Medical Physics Volume, Issue 9	<a href="#">Validation of PTV margin for Gamma Knife Icon frameless treatment using a PseudoPatient® Prime anthropomorphic phantom</a>	Eun Young Han, Parmeswaran Diagaradjane, Dershan Luo, Yao Ding, Georgios Kalaitzakis, Emmanouil Zoros, Kyveli Zourari, Themistoklis Boursianis, Evangelos Pappas, Zhifei Wen, Jihong Wang, Tina Marie Briere	Brain	Elekta Gamma Knife Icon	<b>Moldcare</b>
2021/01	Journal of Cancer Research and Therapeutic	<a href="#">Robustly optimized hybrid intensity-modulated proton therapy for craniospinal irradiation</a>	Noufal M P, ShamurailatpamDayananda Sharma, Ganapathy Krishnan, Mayur Sawant, Utpal Gaikwad Rakesh Jalali	Craniospinal	Proton Therapy	<b>Moldcare</b> + head-and-neck thermoplastic mask and body vaclock cradle
2021/04	International Journal of Particle Therapy Volume 8, Issue 2	<a href="#">Intensity-Modulated Proton Therapy for Nasopharynx Cancer: 2-year Outcomes from a Single Institution</a>	Vonetta M. Williams, Upendra Parvathaneni, George E. Laramore, Saif Aljabab, Tony P. Wong, Jay J. Liao	Nasopharynx	Proton Therapy	<b>Moldcare</b> + Qfix head, neck, and shoulder thermoplastic mask, BoS table
2021/12	ROENTGEN -Vol. 2, No. 2	<a href="#">MR-ONLY como imagem de referência na verificação do posicionamento em Radioterapia MR-ONLY as a reference image in verifying positioning in Radiotherapy</a>	Centro Clínico Champalimaud, Escola Superior de Tecnologia da Saúde de Lisboa, Centro Clínico Champalimaud	Head & Neck	CT, MR	<b>Moldcare</b> + Q-fix® (Assure™ open view split U-frame)
2022/02	Zeitschrift für Medizinische Physik Volume 32, Issue 1	<a href="#">Evaluation of the inter- and intrafraction displacement for head patients treated at the particle therapy centre MedAustron based on the comparison of different commercial immobilisation devices</a>	A.Zechnera, I.Ziegler, E.Huga, C.Lütgendorf-Caucig, M.Stock	Head	Particle Therapy	<b>Moldcare</b> + Qfix BOS™ Headframe, Qfix Fiberplast™ thermoplastic mask and Klarity Green™ thermoplastic mask, Elekta headsten + headsten fixed
2022/02	Cancer/Radiothérapie Volume 26, Issues 1-2	<a href="#">Management and work-up procedures of patients with head and neck malignancies treated by radiation</a>	V. Grégoire, S. Boisbouvier, P. Giraud, P. Maingon, Y. Pointreau, L. Vieilleveigne	Head & Neck		<b>Moldcare</b>
2022/03	Anticancer Research March 2022, 42 (3)	<a href="#">Carbon-ion Radiotherapy for Inoperable Head and Neck Bone and Soft-tissue Sarcoma: Prospective Observational Study</a>	Atsushi Mushi, Nobuteru Kubo, Hidemasa Kawamura, Naoko Okano, Hiro Sato, Kohei Okada, Naoto Osu, Hikaru Yumisaki, Akiko Adachi, Yukihiko Takayasu, Masato Shino, Osamu Nikkuni, Shota Ida, Katsuyuki Shirai, Jun-ichi Saitoh, Satoshi Yokoo, Kazuaki Chikamatsu, Tatsuya Ohno and Working Group on Head and Neck Tumors	Head & Neck	Carbon Ion Radiotherapy	<b>Moldcare</b> + Kuraray Shellfitter thermoplastic mask
2022/05	Journal of Applied Clinical Medical Physics Volume 23, Issue 5	<a href="#">Onboard cone-beam CT-based replan evaluation for head and neck proton therapy</a>	Alexander Stanforth, Liyong Lin,Jonathan J. Beitler, James R. Janopaul-Naylor, Chih-Wei Chang,Robert H. Press, Sagar A. Patel, Jennifer Zhao, Bree Eaton,Eduard E. Schreiber, James Jung,Duncan Bohannon, Tian Liu, Xiaofeng Yang, Mark W. McDonald, Jun Zhou	Head & Neck	Intensity-Modulated Proton Therapy (IMPT)	<b>Moldcare</b> + Orfit HP PRO Base Plates with 5 point masks
2022/06	Radiation Oncology 17	<a href="#">Encouraging early outcomes with image guided pencil beam proton therapy for cranio-spinal irradiation: first report from India</a>	Utpal Gaikwad, M. P. Noufal, Jacinthlyn Sylvia, Ashok K. Reddy, Pankaj Kumar Panda, Srinivas Chilukuri, Dayananda Sharma & Rakesh Jalali	Craniospinal	Pencil Beam Proton Beam Therapy	<b>Moldcare</b> + Qfix Fiberplast thermoplastic mask
2022/07	Cancers 2022, 14	<a href="#">Zero Setup Margin Mask versus Frame Immobilization during Gamma Knife Icon™ Stereotactic Radiosurgery for Brain Metastases</a>	Tugce Kutuk, Rupesh Kotecha, Ranjini Tolakanahalli, D Jay J. Wiczorek, Yongsook C. Lee, Manmeet S. Ahluwalia, Matthew D. Hall, Michael W. McDermott, Haley Appel, Alonso N. Gutierrez, Minesh P. Mehta and Martin C. Tom	Brain	Stereotactic Radiosurgery (SRS)	<b>Moldcare</b> + Elekta Icon Mask Nanor

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2022/08	The Pan African Medical Journal 2022; 42	<u>Stereotactic radiosurgery with Cyberknife®: first case in the United Arab Emirates (a case report)</u>	Nandan Maruti Shanbhag, Christos Antypas, Abdul Karim Msaddi, Teekendra Singh, Sinead Catherine Murphy and Benjie Baguitan	Brain	Stereotactic Radiosurgery (SRS)	<b>Moldcare</b>
2022/09	Technical Innovations & Patient Support in Radiation Oncology	<u>Standard Operating Procedure (SOP) for mould room practices and simulation of head neck cancer patients undergoing proton therapy</u>	Utpal Gaikwad, Minnal Mookaiah, S. Karthekeyan, Manoj Wakde, M.P. Noufal, Srinivas Chilukuri, Dayananda Sharma, Rakesh Jalali, Sapna Nangia	Head & Neck	Proton Therapy	<b>Moldcare</b> + Qfix Fiberplast BoS
2023/02	Journal of Applied Clinical Medical Physics	<u>Commissioning, clinical implementation, and initial experience with a new brain tumor treatment package on a low-field MR-linac</u>	Karen Chin Snyder, Weihua Mao, Joshua P. Kim, Justine Cunningham, Indrin J. Chetty, Salim M. Siddiqui, Parag Parikh, Jennifer Dolan	Brain	MR-Linac	<b>Moldcare</b> + Orfit thermoplastic SRS-Fix Mask system