Name of Journal: *World Journal of Gastroenterology*

Manuscript NO: 62482

Manuscript Type: MINIREVIEWS

Magnetic resonance imaging-based artificial intelligence model in rectal cancer

Wang PP *et al*. AI based on MR in LARC

Pei-Pei Wang, Chao-Lin Deng, Bin Wu

Abstract

Rectal magnetic resonance imaging (MRI) is the preferred method for the diagnosis of rectal cancer as recommended by the guidelines. Rectal MRI can accurately evaluate the tumor location, tumor stage, invasion depth, extramural vascular invasion, and circumferential resection margin. We summarize the progress of research on the use of artificial intelligence (AI) in rectal cancer in recent years. AI, represented by machine learning, is being increasingly used in the medical field. The application of AI models

Magnetic Resonance Imaging-based artificial intelligence model in

ALL　　　IMAGES　　　VIDEOS

426,000 Results　　　Any time ▾

MR-based artificial intelligence model to assess response to therapy in locally advanced **rectal cancer** AI **models** based on textural features of **MR images** of patients with LARC may help to identify patients who will show CR at the end of treatment and those who will not respond to therapy (NR) at an early stage of the treatment.

Author: R. Ferrari, C. Mancini-Terracciano, C. Voena, M. Rengo, M. Zerunian, A. Ciardiello, S. Grasso, V. Ma...

Cited by: 10

Publish Year: 2019

MR-based artificial intelligence model to assess response ...
▶▶ pubmed.ncbi.nlm.nih.gov/31439226/

Was this helpful?　👍　👎

MR-based artificial intelligence model to assess response ...
https://pubmed.ncbi.nlm.nih.gov/31439226
MR-based **artificial intelligence model** to assess response to therapy in locally advanced **rectal cancer** AI **models** based on textural features of MR images of patients with LARC may help to identify patients who will show CR at the end of treatment and those who will not respond to therapy (NR) at an early stage of the treatment.

Cited by: 10　　　Author: R. Ferrari, C. Mancini-Terracciano, C. Voe...
Publish Year: 2019

MR-based artificial intelligence model to assess response ...
https://www.sciencedirect.com/science/article/pii/S0720048X19302177
Sep 01, 2019 · Thus, the aim of this study is to develop **artificial intelligence** (AI) **models** based on textural analysis of volumetric T2-weighted (T2w) MR **imaging** of **rectal cancer** to assess tumor response to therapy and, in particular, to categorize separately CR and NR, developing two different AI **models**: one **model** to discriminate CR from Partial Responders (PR) and NR and another **model** to ...

Cited by: 10　　　Author: R. Ferrari, C. Mancini-Terracciano, C. Voe...
Publish Year: 2019

RadioPathomics Artificial Intelligence Model to Predict ...

检测到您输入了英文，试试切换到国际版？搜英文结果更丰富更准确 ＞

122,000 条结果　　时间不限 ▾

MR-based artificial intelligence model to assess ... 翻译此页
https://pubmed.ncbi.nlm.nih.gov/31439226
Purpose: To develop and validate an Artificial Intelligence (AI) model based on texture analysis of high-resolution T2 weighted MR images able 1) to predict pathologic Complete Response (CR) and 2) to identify non-responders (NR) among patients with locally-advanced rectal cancer (LARC) after receiving neoadjuvant chemoradiotherapy (CRT). ...
Cited by: 11　　　Author: R. Ferrari, C. Mancini-Terracciano, C. Voe...
Publish Year: 2019

MR-based artificial intelligence model to assess ... 翻译此页
https://www.sciencedirect.com/science/article/pii/S0720048X19302177
2019-9-1 · Purpose. To develop and validate an Artificial Intelligence (AI) model based on texture analysis of high-resolution T2 weighted MR images able 1) to predict pathologic Complete Response (CR) and 2) to identify non-responders (NR) among patients with locally-advanced rectal cancer (LARC) after receiving neoadjuvant chemoradiotherapy (CRT).
Cited by: 11　　　Author: R. Ferrari, C. Mancini-Terracciano, C. Voe...
Publish Year: 2019

MR-based artificial intelligence model to assess ... 翻译此页
https://europepmc.org/article/MED/31439226 ▾
PURPOSE:To develop and validate an Artificial Intelligence (AI) model based on texture analysis of high-resolution T2 weighted MR images able 1) to predict pathologic Complete Response (CR) and 2) to identify non-responders (NR) among patients with locally-advanced rectal cancer (LARC) after receiving neoadjuvant chemoradiotherapy (CRT).

MR-based artificial intelligence model to assess ... 翻译此页
https://www.sciencedirect.com/science/article/abs/pii/S0720048X19302177
To develop and validate an Artificial Intelligence (AI) model based on texture analysis of high-resolution T2 weighted MR images able 1) to predict pa...
Cited by: 11　　　Author: R. Ferrari, C. Mancini-Terracciano, C. Voe...
Publish Year: 2019

RadioPathomics Artificial Intelligence Model to Predict ... 翻译此页
https://clinicaltrials.gov/ct2/show/NCT04273451 ▾
RadioPathomics Artificial Intelligence Model to Predict Tumor Regression Grading in Locally Advanced Rectal Cancer (RPAI-TRG) ... (TRG) category based on each patient's radiopathomics features extracted from the Magnetic Resonance Imaging (MRI) and biopsy images. The predictive power to classify each patient into particular TRG category will be ...

Development and validation of magnetic resonance ... 翻译此页
https://atm.amegroups.com/article/view/60720 ▾
Development and validation of magnetic resonance imaging- based radiomics models for preoperative prediction of microsatellite instability in rectal cancer Wei Zhang, Zixing Huang, Jian Zhao, Du He, Mou Li, Hongkun Yin, Song Tian, Huiling Zhang, Bin Song
Author: Wei Zhang, Zixing Huang, Jian Zhao, ...　　　Publish Year: 2021

Artificial intelligence system of faster region-based ... 翻译此页
https://www.ncbi.nlm.nih.gov/pubmed/30707177
Artificial intelligence system of faster region-based convolutional neural network surpassing senior radiologists in evaluation of metastatic lymph nodes of rectal cancer. ... and the magnetic resonance imaging data for pelvic metastatic LNs of each patient was identified by Faster R-CNN. Faster R-CNN based diagnoses were compared with ...

Artificial intelligence in cancer imaging: Clinical ... 翻译此页
https://acsjournals.onlinelibrary.wiley.com/doi/full/10.3322/caac.21552
Artificial intelligence in cancer imaging: Clinical challenges and applications ... to optimize the type and intensity of treatment. The widespread availability of computed tomography (CT) and magnetic resonance imaging (MRI) have fueled the incidental detection of lesions within the body with unclear clinical significance, which then initiates ...

Frontiers | MRI-Based Radiomics Predicts Tumor ... 翻译此页
https://www.frontiersin.org/articles/10.3389/fonc.2019.00552 ▾
Our predictive model based on the commonly used T2-weighted images on pelvic Magnetic Resonance Imaging (MRI) scans has the potential to be adapted in clinical practice.Novelty and Impact Statements: Methods for predicting the response of the...

Magnetic Resonance Imaging Based Radiomic Models ... 翻译此页
https://www.mdpi.com/2072-6694/13/3/552/htm ▾
The management of prostate cancer (PCa) is dependent on biomarkers of biological aggression. This includes an invasive biopsy to facilitate a histopathological assessment of the tumor's grade. This review explores the technical processes of applying magnetic resonance imaging based radiomic models to the evaluation of PCa. By exploring how a deep radiomics approach further optimizes the ...

1　2　3　4　5　＞

432,000 Results   Any time ▾   Open links in new tab

MR-**based artificial intelligence model** to assess response to therapy in locally advanced **rectal cancer** AI **models** based on textural features of **MR images** of patients with LARC may help to identify patients who will show CR at the end of treatment and those who will not respond to therapy (NR) at an early stage of the treatment.

Cited by: 11

Publish Year: 2019

MR-based artificial intelligence model to assess response ...
▶ pubmed.ncbi.nlm.nih.gov/31439226/

Was this helpful? 👍 👎

MR-based artificial intelligence model to assess response ...
https://pubmed.ncbi.nlm.nih.gov/31439226
MR-based **artificial intelligence model** to assess response to therapy in locally advanced **rectal cancer**. AI **models** based on textural features of MR images of patients with LARC may help to identify patients who will show CR at the end of treatment and those who will not respond to therapy (NR) at an early stage of the treatment. **AI models** based on textural features of MR images of patients with LARC may ...

Cited by: 11   Author: R. Ferrari, C. Mancini-Terracciano, C. Voena...
Publish Year: 2019

RadioPathomics Artificial Intelligence Model to Predict ...
https://clinicaltrials.gov/ct2/show/NCT04273451 ▾
RadioPathomics **Artificial Intelligence Model** to Predict Tumor Regression Grading in Locally Advanced **Rectal Cancer** (RPAI-TRG) ... (TRG) category based on each patient's radiopathomics features extracted from the **Magnetic Resonance** Imaging (MRI) and biopsy images. The predictive power to classify each patient into particular TRG category will be ...

Images of Magnetic Resonance Imaging-based Artificial intelligen...
bing.com/images