Model 1:NER ALL

Tokenizer: d4data/biomedical-ner-all

Output:

Processed Summary: cancer survivor registry breast cancer map mind affect physical project first registry kind look emotional social need individual diagnosed breast cancer track need changed throughout cancer journey data raise awareness help develop program address need breast cancer survivor finding registry disseminated online www.cancersupportcommunityorgregistryindexreport2017

NER Results: ['Diagnostic_procedure: map', 'Diagnostic_procedure: mind', 'Diagnostic_procedure: project', 'Diagnostic_procedure: first', 'Diagnostic_procedure: registry', 'Diagnostic_procedure: kind', 'Diagnostic_procedure: look', 'Diagnostic_procedure: emotional', 'Diagnostic_procedure: need', 'History: breast', 'Diagnostic_procedure: need', 'Lab_value: changed', 'Coreference: journey', 'Diagnostic_procedure: data', 'Subject: breast', 'Detailed_description: di', 'Detailed_description: ##sse', 'Detailed_description: ##minated', 'Detailed_description: online', 'Detailed_description: www', 'Detailed_description: ##cer ##su ##pp ##ort ##com ##mun ##ity ##org ##re ##gist ##ry ##ind ##ex ##re ##port ##20', 'Lab_value: ##17', 'Administration: [SEP]']

Processed Summary: primary objective identification one lesion suspicious prostate cancer using novel mri protocol identified transrectal ultrasound trus alone determine lesion identified mri demonstrate clinically significant prostate cancer based pathologic finding ie gleason 7 percentage core involved cancer 50 secondary objective average time mri scan per patient ii correlation lesion mri radical prostatectomy specimen iii determine whether mri 3 dimensional 3d t2 halffourier acquired single turbo spinecho haste sampling perfection application optimized contrast using different flip angle evolution space protocol provide improved rate prostate cancer detection iv yield additional clinically significant prostate cancer diagnosis based mri targeted lesion biopsy v rate benign pathology identified mri ie false positive vi compare cost associated use mri trus biopsy alone outline participant undergo pelvic mri within 12 week patient undergo scheduled prostate biopsy

NER Results: ['Diagnostic_procedure: identification', 'Detailed_description: les', 'Sign_symptom: ##ion', 'Disease disorder: cancer', 'Detailed description: novel', 'Diagnostic procedure: mri', 'Detailed description: ##re ##cta ##l', 'Diagnostic_procedure: ultrasound', 'Detailed_description: les', 'Detailed_description: ##ion', 'Diagnostic procedure: mri', 'Disease disorder: cancer', 'Diagnostic procedure: path', 'Diagnostic procedure: ##gic finding', 'Diagnostic procedure: ie', 'Diagnostic procedure: g', 'Diagnostic procedure: ##son', 'Lab value: percentage', 'Detailed_description: core', 'Diagnostic_procedure: involved', 'Lab_value: 50', 'Detailed description: secondary', 'Detailed description: patient', 'Sign symptom: les', 'Sign symptom: ##ion', 'Diagnostic procedure: mri', 'Detailed description: radical', 'Diagnostic procedure: ##ct ##omy', 'Diagnostic procedure: specimen', 'Diagnostic procedure: mri', 'Detailed description: dimensional 3d', 'Detailed description: ##2', 'Detailed description: ##fo ##uri ##er', 'Detailed description: turbo', 'Detailed description: application', 'Detailed description: ##imi ##zed contrast using', 'Detailed description: flip angle evolution space protocol', 'Lab value: rate', 'Diagnostic procedure: cancer', 'Lab value: iv', 'Lab_value: clinical', 'Diagnostic_procedure: cancer', 'Diagnostic_procedure: mri', 'Detailed_description: les', 'Sign_symptom: ##ion', 'Diagnostic_procedure: ##psy', 'Lab_value: rate', 'Detailed_description: pathology', 'Diagnostic_procedure: mri', 'Diagnostic_procedure: ie', 'Lab_value: positive', 'Lab_value: compare', 'Diagnostic_procedure: cost', 'Diagnostic_procedure: ##us', 'Diagnostic_procedure: ##psy', 'Detailed_description: outline', 'Biological_structure: ##vic', 'Diagnostic_procedure: mri', 'Date: 12 week', 'Detailed_description: scheduled', 'Diagnostic_procedure: bio ##psy']

Model2: vineetsharma/BioMedical_NER-maccrobat-distilbert

Tokenizer: d4data/biomedical-ner-all

Output:

Processed Summary: na

NER Results: []

Processed Summary: primary objective determine clinical molecular subtypes differ expected result 15 time determine molecular information alters treatment plan perceived treating physician survey subject consented trial archival tissue primary tumor obtained stored tissue metastatic site also obtained physician asked preferred medication next two line treatment pam50 testing determine molecular subtypes determined primary metastatic tissue molecular subtype result primary tissue returned physician physician asked preferred medication next two line treatment number time medication change first second survey determined subject active participation last long consent process

NER Results: ['Diagnostic_procedure: information', 'Sign_symptom: tumor', 'Coreference: meta', 'Date: ##static', 'Diagnostic_procedure: pam', 'Diagnostic_procedure: ##50', 'Medication: medication', 'Sign_symptom: active']

Processed Summary: protocol describes phase ii study involving patient stage iv adenocarcinoma lung treatment consist cyclophosphamide 300 mgm² given iv day 1 day 57 day 4 immunization intradermal vaccine injection 4 separate site bilateral upper arm bilateral upper thigh repeated every 14 day time 2 followed every 28 day time 3 day 4 18 32 60 88 116 decavac tetanus shot 05 cc intramuscular im given first vaccine atra 150 mgm2day oral three time daily tid dosing administered first fourth vaccine day 57 day 6163 patient achieving stable disease sd partial response pr complete response cr restaging initial 6 vaccine receive additional vaccine every 3 month disease progression vaccine consist gmcd40l bystander cell admixed equivalent number 2 allogeneic tumor cell line 7 day window study related exam test procedure

NER Results: ['Therapeutic_procedure: aden', 'Therapeutic_procedure: ##oca', 'Therapeutic_procedure: ##rc', 'Therapeutic_procedure: ##ino', 'Therapeutic_procedure: lung treatment', 'Medication: cy', 'Nonbiological_location: ##cl', 'Nonbiological_location: ##op', 'Nonbiological_location: ##hos', 'Nonbiological_location: ##mide', 'Lab_value: mgm ##²', 'Date: day', 'Date: day', 'Date: day', 'Therapeutic_procedure: im', 'Therapeutic_procedure: ##mun', 'Therapeutic_procedure: ##ization', 'Administration: intra', 'Therapeutic_procedure: ##der', 'Therapeutic_procedure: vaccine injection', 'Biological_structure: arm', 'Biological_structure: bilateral', 'Biological_structure: thigh', 'Detailed_description: repeated', 'Date: time', 'Detailed_description: 2', 'Date: 28 day', 'Date: day 4', 'Date: 32', 'Lab_value: 60', 'Lab_value: 88', 'Date: ##tan', 'Therapeutic_procedure: intra', 'Therapeutic_procedure: ##mus', 'Therapeutic_procedure: im', 'Lab_value: 150', 'Mass: ##2', 'Date: vaccine day', 'Diagnostic_procedure: vaccine', 'Frequency: 3 month', 'Coreference: [SEP]']

Processed Summary: prospective longitudinal interventional study bluestar genomics early detection pancreatic cancer test test ordered result returned siteinvestigators study planned enroll 10000 male female 50 year age newly diagnosed type ii diabetes within 90 day prior enrollment study population target 70 subject 65 year old 53 male target enroll least 50 subject bmi 32 subject undergo 3 blood draw time enrollment t0 6 month t1 12 month t2 diabetes diagnosis test result detected mri imaging performed ass pancreas mri imaging study result abnormal subject referred back enrolling clinician additional diagnostic work part routine healthcare 24 month diabetes diagnosis review electronic medical record emr performed subject detected test result study also include bluestar genomics test detected imaging arm negative control imaging arm time point subject included negative imaging arm prespecified randomly selected among bluestar genomics detected case gender ratio age matched bluestar genomics detected undergo mri imaging

NER Results: ['Disease_disorder: ##omics', 'Diagnostic_procedure: pan', 'Diagnostic_procedure: ##cre', 'Diagnostic_procedure: cancer test', 'Sex: female', 'Age: year', 'Disease_disorder: ii diabetes', 'Date: day',

'Lab_value: 70', 'Age: year old', 'Diagnostic_procedure: b', 'Diagnostic_procedure: ##mi', 'Diagnostic_procedure: subject', 'Diagnostic_procedure: draw', 'Diagnostic_procedure: t', 'Diagnostic_procedure: ##2', 'Diagnostic_procedure: imaging', 'Diagnostic_procedure: imaging', 'Diagnostic_procedure: diabetes', 'Diagnostic_procedure: study', 'Diagnostic_procedure: blues', 'Diagnostic_procedure: ##tar', 'Diagnostic_procedure: blues', 'Diagnostic_procedure: ##tar', 'Diagnostic_procedure: ##tar',

Processed Summary: even tumor sample collected participant obligation participate vaccine study participant regularly planned surgery described surgeon surgery tumor sample collected collect tumor needed could otherwise thrown away tumor sample frozen placed storage two year

NER Results: ['Diagnostic_procedure: sample', 'Detailed_description: placed storage', 'Duration: year']

Processed Summary: prostate cancer recently surpassed lung cancer become common cancer american men estimated number new prostate cancer case 2005 expected 232090 198000 2002 prostate cancer represents 29 new cancer diagnosis men comparable incidence breast cancer woman prostate cancer continues disproportionately affect minority men patient early localized prostate cancer number treatment option including surgical removal prostate radiation therapy external beam implantation radioactive seed hormonal therapy cryoablation expectant monitoring watchful waiting currently available treatment localized prostate cancer carry risk number iatrogenic symptom including urinary incontinence ed others vary depending treatment received need symptom management education greater men lower health literacy health literacy ability individual capacity obtain process understand health information service needed make appropriate health decision shown strongly related health status health outcome person lower health literacy skill significantly le likely take preventive action improve health health literacy particular concern men prostate cancer africanamerican men group significantly higher prevalence prostate cancer overrepresented among lower literacy men prostate cancer3 study proposed develop evaluate randomized controlled trial rct empiricallyderived symptom management intervention lower literacy men prostate cancer intervention based biopsychosocial model prostate cancer symptom management developed general ucsf symptom management model smm banduras selfefficacy theory efficacy intervention evaluated 200 men localized prostate cancer randomized receive either new tailored symptom management program usual care participant intervention control group receive booklet coping cancer available patient treated ucsf comprehensive cancer center intervention group participant also receive new symptom management intervention tailored individual symptom profile group followed 6 month enrollment assessment enrollment 5 additional timepoints proposed research project includes following specific aim conduct rct evaluate tailored symptom management intervention targeted lower literacy men localized prostate cancer investigator hypothesize men receive tailored symptom management intervention n100 report significantly le symptom distress 6month followup men control condition n100 symptom distress measured expanded prostate cancer index composite epic urinary bother sexual bother subscales intervention control group stratified literacy level type prostate cancer treatment complete planned training experience include course responsible conduct research symptom management cancer care cancer prevention cancer epidemiology clinical research diverse community longitudinal analysis method provide knowledge skill necessary successfully conduct rct assemble group key personnel expertise necessary guide training experience rct primary mentor leslie schover phd expert cancer symptom management key personnel include stephen j lepore phd principal investigator previous prostate cancer psychosocial intervention study brian j mile md expert prostate cancer treatment robert morgan phd senior methodologist

NER Results: ['Disease_disorder: cancer', 'Disease_disorder: lung']

Model3: StivenLancheros/roberta-base-biomedical-clinical-es-finetuned-ner-CRAFT Augmented EN

 $To kenizer: Stiven Lancheros/roberta-base-biomedical-clinical-es-fine tuned-ner-CRAFT_Augmented_EN$

Output:

Processed Summary: treatment drug chemotherapy frequent evaluation doctor standard practice help prevent colon cancer recurring surgery despite measure cancer recur significant number people usually within first 23 year diagnosis study researcher hope identify genetic environmental factor may contribute person developing recurrent colon cancer help identify factor blood tissue sample studied also asked provide information background lifestyle eating habit participant able take part study known colon cancer removed surgery agreed receive chemotherapy help prevent cancer recurring take part study medical information reviewed performance status evaluation well perform everyday activity done help doctor decide eligible take part study found eligible agree take part study asked fill 2 questionnaire one questionnaire asks background age education etc work history exposure toxic substance medical history smoking alcohol history family history cancer level physical activity second questionnaire contains question type food eat often eat whether take vitamin type take 30 minute fill questionnaire surgery remove colon cancer performed md anderson asked participate tissue portion study described asked participate blood sample analysis study evaluation questionnaire portion study every 3 month maximum 2 year starting beginning followup period treatment complete disease return ever occurs first surgery performed md anderson cancer center sample cancer tissue analyzed looking biologic factor related colon cancer blood sample 4 teaspoon gene analysis looking biologic factor associated colon cancer also collected followup begin study evaluation md anderson every 3 month 2 year disease return ever occurs first blood sample 4 teaspoon gene analysis collected within 14 day completion chemotherapy every 3 month 2 year enroll study colon cancer recurs blood sample taken time also asked fill 2 questionnaire described completion chemotherapy treatment applicable 1 2 year followup begin colon cancer recurs asked fill questionnaire time require surgery cancer enrolling study sample leftover tissue collected genetic analysis surgery performed md anderson cancer center informed result analysis blood tumor sample questionnaire research exploratory participation study end disease return 2 year begin whichever occurs first investigational study taking part study requires return frequently md anderson 200 participant take part study enrolled md anderson

NER Results: ['Cell: Ġcolon', 'Sequence: Ġgenetic', 'Cell: Ġblood', 'Cell: Ġcancer', 'Cell: Ġsubs tance', 'Cell: Ġan', 'Cell: Ġan derson', 'Cell: Ġcancer', 'Sequence: as po on', 'Sequence: Ġgene', 'Sequence: as po on', 'Cell: Ġcancer', 'Cell: Ġblood', 'Sequence: Ġresult', 'Cell: Ġan']

Processed Summary: patient small breast cancer undergo cryoablation breast cancer approximately six week cryoablation definitive breast surgery performed blood drawn research cryoablation surgery regular followup visit blood tissue sample used determine immune response

NER Results: []

Processed Summary: objective determine circulating level calgranulin calgranulin b patient estrogen receptor negative estrogen receptor positive newly diagnosed primary stage iiii adenocarcinoma breast outline pilot study patient undergo blood draw following diagnosis breast cancer ass level circulating tumor marker calgranulin calgranulin b serum sample evaluated enzymelinked immunosorbent assay tumor marker expression projected accrual total 60 patient accrued study

NER Results: ['Protein: gran ulin Ġcal gran ulin Ġb', 'Cell: Ġstage Ġi iii Ġadenocarcinoma', 'Protein: gran ulin Ġcal gran ulin Ġb', 'Sequence: ent']

Processed Summary: goal study inform sustainable implementation cervical cancer screening service lowresource area senegal naïve cancer screening program investigating access barrier determinant initial uptake developing adapting peer education health promotion intervention diverse dynamic context achieve sustained utilization framework implementation science study proven technical solution applicable real world setting investigator study implementation via proven intervention optimized screening service best fit local context established complementary framework guide study investigator apply patientcentered access framework ass demandside barrier facilitator uptake aim 1 integrated theory health behavior change evaluate peer education

program facilitates selfmanagement behavior woman aim 2 dynamic sustainability framework evaluate initial uptake sustained utilization health service aim 3 investigator seek understand dynamic nature influential factor within local context process investigator facilitate responsive adaptation intervention order reduce barrier maximize early uptake sustain utilization overview study data collection achieve aim investigator conduct clusterrandomized stepped wedge study across three representative cluster containing district center two rural site kedougou region aim investigator collect data baseline 6month interval cluster data collection interval coincide initiation intervention new cluster aim 1 investigator develop participatory approach pilot conduct survey eligible client household questionnaire well focus group fg woman age 3044 4559 indepth interview men age 3059 aim 2 investigator describe development piloting implementation adaptation aim 1 informed contextspecific multilevel peer education curriculum across cluster stepped wedge approach kedougou region investigator collect quantitative program reach data qualitative process evaluation data time period data used adapt intervention time achieve aim 3 investigator collect aggregated health service level utilization data individual survey

NER Results: ['Cell: Ġcancer Ġscreening Ġservice', 'Cell: res ource Ġarea Ġs ene gal Ġna ï ve Ġcancer Ġscreening Ġprogram', 'Sequence: Ġtheory Ġhealth Ġbehavior Ġchange', 'Sequence: Ġqualitative Ġprocess', 'Cell: Ġservice']

Processed Summary: cancer survivor registry breast cancer map mind affect physical project first registry kind look emotional social need individual diagnosed breast cancer track need changed throughout cancer journey data raise awareness help develop program address need breast cancer survivor finding registry disseminated online www.cancersupport.communityorgregistryindexreport2017

NER Results: ['Cell: Ġcancer', 'Cell: viv']

Processed Summary: primary objective identification one lesion suspicious prostate cancer using novel mri protocol identified transrectal ultrasound trus alone determine lesion identified mri demonstrate clinically significant prostate cancer based pathologic finding ie gleason 7 percentage core involved cancer 50 secondary objective average time mri scan per patient ii correlation lesion mri radical prostatectomy specimen iii determine whether mri 3 dimensional 3d t2 halffourier acquired single turbo spinecho haste sampling perfection application optimized contrast using different flip angle evolution space protocol provide improved rate prostate cancer detection iv yield additional clinically significant prostate cancer diagnosis based mri targeted lesion biopsy v rate benign pathology identified mri ie false positive vi compare cost associated use mri trus biopsy alone outline participant undergo pelvic mri within 12 week patient undergo scheduled prostate biopsy

NER Results: ['Cell: Ġprostate', 'Cell: Ġcore Ġinvolved Ġcancer', 'Cell: Ġprosta tec tomy Ġspeci men', 'Protein: ri', 'Sequence: Ġperfec', 'Sequence: lip Ġang le Ġevolution Ġsp ace', 'Cell: Ġcancer', 'Cell: Ġcancer', 'Cell: Ġpath ology', 'Protein: Ġm', 'Protein: ri', 'Protein: ri']

Model4: dslim/bert-base-NER

Tokenizer: dslim/bert-base-NER

Output:

Processed Summary: treatment drug chemotherapy frequent evaluation doctor standard practice help prevent colon cancer recurring surgery despite measure cancer recur significant number people usually within first 23 year diagnosis study researcher hope identify genetic environmental factor may contribute person developing

recurrent colon cancer help identify factor blood tissue sample studied also asked provide information background lifestyle eating habit participant able take part study known colon cancer removed surgery agreed receive chemotherapy help prevent cancer recurring take part study medical information reviewed performance status evaluation well perform everyday activity done help doctor decide eligible take part study found eligible agree take part study asked fill 2 questionnaire one questionnaire asks background age education etc work history exposure toxic substance medical history smoking alcohol history family history cancer level physical activity second questionnaire contains question type food eat often eat whether take vitamin type take 30 minute fill questionnaire surgery remove colon cancer performed md anderson asked participate tissue portion study described asked participate blood sample analysis study evaluation questionnaire portion study every 3 month maximum 2 year starting beginning followup period treatment complete disease return ever occurs first surgery performed md anderson cancer center sample cancer tissue analyzed looking biologic factor related colon cancer blood sample 4 teaspoon gene analysis looking biologic factor associated colon cancer also collected followup begin study evaluation md anderson every 3 month 2 year disease return ever occurs first blood sample 4 teaspoon gene analysis collected within 14 day completion chemotherapy every 3 month 2 year enroll study colon cancer recurs blood sample taken time also asked fill 2 questionnaire described completion chemotherapy treatment applicable 1 2 year followup begin colon cancer recurs asked fill questionnaire time require surgery cancer enrolling study sample leftover tissue collected genetic analysis surgery performed md anderson cancer center informed result analysis blood tumor sample questionnaire research exploratory participation study end disease return 2 year begin whichever occurs first investigational study taking part study requires return frequently md anderson 200 participant take part study enrolled md anderson

NER Results: []

Processed Summary: patient small breast cancer undergo cryoablation breast cancer approximately six week cryoablation definitive breast surgery performed blood drawn research cryoablation surgery regular followup visit blood tissue sample used determine immune response

NER Results: []

Processed Summary: objective determine circulating level calgranulin calgranulin b patient estrogen receptor negative estrogen receptor positive newly diagnosed primary stage iiii adenocarcinoma breast outline pilot study patient undergo blood draw following diagnosis breast cancer ass level circulating tumor marker calgranulin calgranulin b serum sample evaluated enzymelinked immunosorbent assay tumor marker expression projected accrual total 60 patient accrued study

NER Results: []

Processed Summary: goal study inform sustainable implementation cervical cancer screening service lowresource area senegal naïve cancer screening program investigating access barrier determinant initial uptake developing adapting peer education health promotion intervention diverse dynamic context achieve sustained utilization framework implementation science study proven technical solution applicable real world setting investigator study implementation via proven intervention optimized screening service best fit local context established complementary framework guide study investigator apply patientcentered access framework ass demandside barrier facilitator uptake aim 1 integrated theory health behavior change evaluate peer education program facilitates selfmanagement behavior woman aim 2 dynamic sustainability framework evaluate initial uptake sustained utilization health service aim 3 investigator seek understand dynamic nature influential factor within local context process investigator facilitate responsive adaptation intervention order reduce barrier maximize early uptake sustain utilization overview study data collection achieve aim investigator conduct clusterrandomized stepped wedge study across three representative cluster containing district center two rural site kedougou region aim investigator collect data baseline 6month interval cluster data collection interval coincide initiation intervention new cluster aim 1 investigator develop participatory approach pilot conduct survey eligible client household questionnaire well focus group fg woman age 3044 4559 indepth interview men age 3059 aim 2 investigator describe development piloting implementation adaptation aim 1 informed

contextspecific multilevel peer education curriculum across cluster stepped wedge approach kedougou region investigator collect quantitative program reach data qualitative process evaluation data time period data used adapt intervention time achieve aim 3 investigator collect aggregated health service level utilization data individual survey

NER Results: []

Processed Summary: cancer survivor registry breast cancer map mind affect physical project first registry kind look emotional social need individual diagnosed breast cancer track need changed throughout cancer journey data raise awareness help develop program address need breast cancer survivor finding registry disseminated online www.cancersupport.communityorgregistryindexreport2017

NER Results: []

Processed Summary: primary objective identification one lesion suspicious prostate cancer using novel mri protocol identified transrectal ultrasound trus alone determine lesion identified mri demonstrate clinically significant prostate cancer based pathologic finding ie gleason 7 percentage core involved cancer 50 secondary objective average time mri scan per patient ii correlation lesion mri radical prostatectomy specimen iii determine whether mri 3 dimensional 3d t2 halffourier acquired single turbo spinecho haste sampling perfection application optimized contrast using different flip angle evolution space protocol provide improved rate prostate cancer detection iv yield additional clinically significant prostate cancer diagnosis based mri targeted lesion biopsy v rate benign pathology identified mri ie false positive vi compare cost associated use mri trus biopsy alone outline participant undergo pelvic mri within 12 week patient undergo scheduled prostate biopsy

NER Results: []

Model5: Clinical-AI-Apollo/Medical-NER

Tokenizer: Clinical-AI-Apollo/Medical-NER

Details: This model is a fine-tuned version of <u>DeBERTa</u> on the PubMED Dataset.

- DeBERTaV3: Improving DeBERTa using ELECTRA-Style Pre-Training with Gradient-Disentangled Embedding Sharing
- <u>DeBERTa</u> improves the BERT and RoBERTa models using disentangled attention and enhanced mask decoder. With those two improvements, DeBERTa out perform RoBERTa on a majority of NLU tasks with 80GB training data.
- The DeBERTa V3 base model comes with 12 layers and a hidden size of 768. It has only 86M backbone parameters with a vocabulary containing 128K tokens which introduces 98M parameters in the Embedding layer. This model was trained using the 160GB data as DeBERTa V2.

Output:

Asking to truncate to max_length but no maximum length is provided and the model has no predefined maximum length. Default to no truncation.

Processed Summary: na

NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: _na', 'SEVERITY: [SEP]']

Processed Summary: primary objective determine clinical molecular subtypes differ expected result 15 time determine molecular information alters treatment plan perceived treating physician survey subject consented trial archival tissue primary tumor obtained stored tissue metastatic site also obtained physician asked preferred

medication next two line treatment pam50 testing determine molecular subtypes determined primary metastatic tissue molecular subtype result primary tissue returned physician physician asked preferred medication next two line treatment number time medication change first second survey determined subject active participation last long consent process

```
NER Results: ['SEVERITY: [CLS]', 'DIAGNOSTIC_PROCEDURE: _molecular _subtypes', 'DATE: _15', 'BIOLOGICAL_STRUCTURE: _tumor', 'BIOLOGICAL_STRUCTURE: _site', 'DIAGNOSTIC_PROCEDURE: 50 _testing', 'BIOLOGICAL_STRUCTURE: _tissue', 'DIAGNOSTIC_PROCEDURE: _subtype', 'DETAILED_DESCRIPTION: _second _survey', 'SEVERITY: [SEP]']
```

Processed Summary: protocol describes phase ii study involving patient stage iv adenocarcinoma lung treatment consist cyclophosphamide 300 mgm² given iv day 1 day 57 day 4 immunization intradermal vaccine injection 4 separate site bilateral upper arm bilateral upper thigh repeated every 14 day time 2 followed every 28 day time 3 day 4 18 32 60 88 116 decavac tetanus shot 05 cc intramuscular im given first vaccine atra 150 mgm2day oral three time daily tid dosing administered first fourth vaccine day 57 day 6163 patient achieving stable disease sd partial response pr complete response cr restaging initial 6 vaccine receive additional vaccine every 3 month disease progression vaccine consist gmcd40l bystander cell admixed equivalent number 2 allogeneic tumor cell line 7 day window study related exam test procedure

```
NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: _iv', 'BIOLOGICAL_STRUCTURE: _lung', 'MEDICATION: _cyclophosphamide', 'DATE: _4', 'MEDICATION: _immunization', 'DETAILED_DESCRIPTION: dermal', 'DETAILED_DESCRIPTION: _injection', 'DETAILED_DESCRIPTION: _separate _site', 'BIOLOGICAL_STRUCTURE: _upper _arm', 'DURATION: _14 _day _time', 'DATE: _time', 'LAB_VALUE: _18 _32 _60 _88 _116', 'MEDICATION: ca vac', 'MEDICATION: _shot', 'DOSAGE: _cc', 'DETAILED_DESCRIPTION: _intramuscular', 'DETAILED_DESCRIPTION: _first', 'MEDICATION: _vaccine', 'MEDICATION: tra', 'DOSAGE: _mg m 2 day _oral', 'DATE: _day _57 _day _6 163', 'SIGN_SYMPTOM: _disease _sd _partial _response', 'SIGN_SYMPTOM: _response', 'MEDICATION: _vaccine', 'DATE: _month', 'DETAILED_DESCRIPTION: _progression _vaccine', 'DETAILED_DESCRIPTION: d 40 1 _bystander _cell _ad mixed _equivalent _number _2 _allogeneic _tumor _cell _line', 'DURATION: _day', 'SEVERITY: [SEP]']
```

Processed Summary: prospective longitudinal interventional study bluestar genomics early detection pancreatic cancer test test ordered result returned siteinvestigators study planned enroll 10000 male female 50 year age newly diagnosed type ii diabetes within 90 day prior enrollment study population target 70 subject 65 year old 53 male target enroll least 50 subject bmi 32 subject undergo 3 blood draw time enrollment t0 6 month t1 12 month t2 diabetes diagnosis test result detected mri imaging performed ass pancreas mri imaging study result abnormal subject referred back enrolling clinician additional diagnostic work part routine healthcare 24 month diabetes diagnosis review electronic medical record emr performed subject detected test result study also include bluestar genomics test detected imaging arm negative control imaging arm time point subject included negative imaging arm prespecified randomly selected among bluestar genomics detected case gender ratio age matched bluestar genomics detected undergo mri imaging

```
NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: _longitudinal _interventional', 'DETAILED_DESCRIPTION: _detection', 'DIAGNOSTIC_PROCEDURE: _test', 'DETAILED_DESCRIPTION: _female', 'DETAILED_DESCRIPTION: _age', 'DETAILED_DESCRIPTION: _diagnosed', 'DATE: _90 _day _prior', 'LAB_VALUE: _70', 'AGE: _year _old', 'HISTORY: _32', 'DATE: 0 _6 _month _t 1 _12 _month _t 2', 'DIAGNOSTIC_PROCEDURE: _diagnosis', 'DETAILED_DESCRIPTION: s _pancreas', 'DIAGNOSTIC_PROCEDURE: ri _imaging _study', 'LAB_VALUE: _abnormal', 'CLINICAL_EVENT: _referred', 'THERAPEUTIC_PROCEDURE: _diagnostic',
```

'DATE: _month', 'DISEASE_DISORDER: _diabetes', 'DETAILED_DESCRIPTION: _control _imaging', 'DIAGNOSTIC_PROCEDURE: ri _imaging', 'SEVERITY: [SEP]']

Processed Summary: even tumor sample collected participant obligation participate vaccine study participant regularly planned surgery described surgeon surgery tumor sample collected collect tumor needed could otherwise thrown away tumor sample frozen placed storage two year

NER Results: ['DURATION: _two _year', 'SEVERITY: [SEP]']

Processed Summary: prostate cancer recently surpassed lung cancer become common cancer american men estimated number new prostate cancer case 2005 expected 232090 198000 2002 prostate cancer represents 29 new cancer diagnosis men comparable incidence breast cancer woman prostate cancer continues disproportionately affect minority men patient early localized prostate cancer number treatment option including surgical removal prostate radiation therapy external beam implantation radioactive seed hormonal therapy cryoablation expectant monitoring watchful waiting currently available treatment localized prostate cancer carry risk number iatrogenic symptom including urinary incontinence ed others vary depending treatment received need symptom management education greater men lower health literacy health literacy ability individual capacity obtain process understand health information service needed make appropriate health decision shown strongly related health status health outcome person lower health literacy skill significantly le likely take preventive action improve health health literacy particular concern men prostate cancer africanamerican men group significantly higher prevalence prostate cancer overrepresented among lower literacy men prostate cancer3 study proposed develop evaluate randomized controlled trial rct empiricallyderived symptom management intervention lower literacy men prostate cancer intervention based biopsychosocial model prostate cancer symptom management developed general ucsf symptom management model smm banduras selfefficacy theory efficacy intervention evaluated 200 men localized prostate cancer randomized receive either new tailored symptom management program usual care participant intervention control group receive booklet coping cancer available patient treated ucsf comprehensive cancer center intervention group participant also receive new symptom management intervention tailored individual symptom profile group followed 6 month enrollment assessment enrollment 5 additional timepoints proposed research project includes following specific aim conduct rct evaluate tailored symptom management intervention targeted lower literacy men localized prostate cancer investigator hypothesize men receive tailored symptom management intervention n100 report significantly le symptom distress 6month followup men control condition n100 symptom distress measured expanded prostate cancer index composite epic urinary bother sexual bother subscales intervention control group stratified literacy level type prostate cancer treatment complete planned training experience include course responsible conduct research symptom management cancer care cancer prevention cancer epidemiology clinical research diverse community longitudinal analysis method provide knowledge skill necessary successfully conduct rct assemble group key personnel expertise necessary guide training experience rct primary mentor leslie schover phd expert cancer symptom management key personnel include stephen i lepore phd principal investigator previous prostate cancer psychosocial intervention study brian j mile md expert prostate cancer treatment robert morgan phd senior methodologist

NER Results: ['SEVERITY: [CLS]', 'DISEASE_DISORDER: _cancer', 'LAB_VALUE: _men', 'DISEASE_DISORDER: _cancer', 'DISEASE_DISORDER: _cancer', 'LAB_VALUE: _29', 'SIGN_SYMPTOM: _cancer', 'DISEASE_DISORDER: _cancer', 'DISEASE_DISORDER: _cancer', 'DISEASE_DISORDER: _cancer', 'DISEASE_DISORDER: _cancer', 'THERAPEUTIC_PROCEDURE: _removal', 'THERAPEUTIC_PROCEDURE: _beam _implantation', 'THERAPEUTIC_PROCEDURE: _seed', 'THERAPEUTIC_PROCEDURE: _therapy', 'THERAPEUTIC_PROCEDURE: abl ation', 'DISEASE_DISORDER: _cancer', 'DETAILED_DESCRIPTION: atro genic', 'SIGN_SYMPTOM: _incontinence', 'DIAGNOSTIC_PROCEDURE: _status', 'DIAGNOSTIC_PROCEDURE: _literacy', 'DETAILED_DESCRIPTION: american', 'DISEASE_DISORDER: _cancer', 'DETAILED_DESCRIPTION: _intervention _based

```
_biopsy cho social _model', 'DISEASE_DISORDER: _cancer', 'DETAILED_DESCRIPTION: _model', 'DETAILED_DESCRIPTION: _men', 'DISEASE_DISORDER: _prostate _cancer', 'DETAILED_DESCRIPTION: _booklet _coping _cancer _available _patient _treated', 'NONBIOLOGICAL_LOCATION: _center', 'DETAILED_DESCRIPTION: _new', 'THERAPEUTIC_PROCEDURE: _management _intervention', 'DETAILED_DESCRIPTION: _individual _symptom _profile', 'DATE: _month', 'DATE: _5', 'DETAILED_DESCRIPTION: _tailored', 'THERAPEUTIC_PROCEDURE: _management', 'DETAILED_DESCRIPTION: _literacy _men', 'DISEASE_DISORDER: _cancer', 'DETAILED_DESCRIPTION: _tailored', 'THERAPEUTIC_PROCEDURE: _management', 'SIGN_SYMPTOM: _distress', 'DATE: month _followup', 'DIAGNOSTIC_PROCEDURE: _distress', 'DIAGNOSTIC_PROCEDURE: _cancer _index _composite', 'DETAILED_DESCRIPTION: _research', 'DETAILED_DESCRIPTION: over', 'DETAILED_DESCRIPTION: _psychosocial', 'SEVERITY: [SEP]']
```

Processed Summary: na

NER Results: ['SEVERITY: [CLS]', 'DETAILED DESCRIPTION: _na', 'SEVERITY: [SEP]']

Processed Summary: trial investigatorinitiated singlecenter openlabel singlearm exploratory study mrna neoantigen tumor vaccine treatment advanced gastric cancer including two phase dose escalation dose expansion evaluate safety tolerability neoantigen tumor vaccine subject advanced gastric cancer conducting dose escalation trial subject diagnosed advanced gastric cancer preliminarily evaluate efficacy neoantigen tumor vaccine subject advanced gastric cancer according characteristic safety efficacy data dose escalation phase dose expansion performed intended clinical dose based investigator judgment treatment performed combination pd111 evaluate efficacy safety profile neoantigen tumor vaccine specific dose dose escalation phase dose expansion phase include screening period week 4 week 2 baseline period week 1 day 1 treatment period day 1 week 8 16 followup period subject signed provided formal informed consent entered screening period treatment period included initial treatment period day 1 week 8 enhanced treatment period week 12 week 16 investigator determined whether enter enhanced treatment period based comprehensive judgment subject efficacy safety compliance factor week 8 week 12 dose escalation phase 18 subject expected enrolled 100 µg 200 µg 400 µg 6 subject 100 µg 6 subject 200 µg 6 subject 400 µg low dose group enrolled first next dose group started number subject met requirement subject withdrew early low dose group given priority investigator choose optimal clinical dose dose expansion one dose group multiple dose group pd111 drug used parallel confirm efficacy safety neoantigen tumor vaccine 18 subject usage dosage pd111 aligned package insert

```
NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: center _open', 'DETAILED_DESCRIPTION: antigen _tumor', 'BIOLOGICAL_STRUCTURE: _cancer', 'DETAILED_DESCRIPTION: _tumor', 'DISEASE_DISORDER: _cancer', 'DETAILED_DESCRIPTION: _tumor', 'DETAILED_DESCRIPTION: _specific', 'DATE: _week _1 _day _1', 'DATE: _1 _week _8 _16', 'DATE: _1 _week _8', 'DATE: _12 _week _16', 'DATE: _8 _week _12', 'DETAILED DESCRIPTION: _18', 'DETAILED DESCRIPTION: d 1 1 1 _aligned', 'SEVERITY: [SEP]']
```

Processed Summary: primary objective goal conduct randomized controlled trial determine impact visual presentation context radiation oncologist discussion patient consultation patient satisfaction end consultation visit end treatment anxiety start treatment decision regret following treatment perception side effect following treatment note attending radiation oncologist responsible reviewing powerpoint presentation patient taking time answer question patient outline patient randomized 1 2 arm arm standard education patient receive standard prostate cancer radiation oncology consultation arm b visual enhanced education patient receive visually enhanced prostate cancer educational powerpoint presentation including prostate anatomy pathologic result surgical option radiation therapy prognosis pictograph radiation oncology consultation

```
NER Results: ['DETAILED_DESCRIPTION: _time _answer _question _patient _outline', 'DETAILED_DESCRIPTION: _2 _arm _arm _standard _education', 'DETAILED_DESCRIPTION: _prostate _cancer', 'DETAILED_DESCRIPTION: _visual _enhanced _education',
```

'DETAILED_DESCRIPTION: _enhanced _prostate _cancer _educational', 'DETAILED_DESCRIPTION: _anatomy', 'DETAILED_DESCRIPTION: _therapy', 'DETAILED_DESCRIPTION: _oncology', 'SEVERITY: [SEP]']

Processed Summary: na

NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: _na', 'SEVERITY: [SEP]']

Processed Summary: na

NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: _na', 'SEVERITY: [SEP]']

Processed Summary: na

NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: _na', 'SEVERITY: [SEP]']

Processed Summary: controlled randomized open prospective multicentric study 214 volunteer patient aged 18 70 breast cancer start taxol treatment possessing smartphone recruited randomized two group 107 control group smartphone application placebo number step 107 equipped application bouge coached group three month patient daily physical activity coached group smartphone application bouge receives computer coaching increase physical activity direct medical intervention notification computer pusch control group coached application simple display number step

NER Results: ['SEVERITY: [CLS]', 'DETAILED_DESCRIPTION: _randomized _open _prospective _multi centric _study', 'HISTORY: _18 _70 _breast _cancer', 'DETAILED_DESCRIPTION: _possessing _smartphone _recruited _randomized _two _group _107 _control _group _smartphone _application _placebo _number _step _107 _equipped _application _bou ge _coached _group', 'DETAILED_DESCRIPTION: _computer _p usch _control _group _coached _application _simple _display _number _step', 'SEVERITY: [SEP]']

Processed Summary: incidence oesophageal adenocarcinoma rising last decade despite improvement oncological surgical therapy associated survival remains poor mainly due delay diagnosis advanced stage presentation identifying patient earlier stage well risk cancer may lead survival benefit barretts oesophagus established risk factor development oesophageal adenocarcinoma established histopathologic progression lowgrade highgrade dysplasia hgd oesophageal adenocarcinoma oac barretts oesophagus patient currently undergo regular endoscopic surveillance allow earlier detection oesophageal cancer primary objective evaluate diagnostic accuracy clinical utility volatile organic compound voc exhaled breath detect early stage oesophageal adenocarcinoma highgrade dysplastic barretts oesophagus patient fasted minimum 6 hour prior breath sample part routine clinical care breath collection conducted using previously validated method sample breath 500ml collected using breath collecting device utilising bag breath sample collected within thermal desorption tube markes international llantrisant uk transferred central laboratory analysis gas chromatography mass spectrometry gcms proton transfer reaction time flight mass spectrometry ptrtofms raw data file extracted analysed accordance established protocol

NER Results: ['SEVERITY: [CLS]', 'DURATION: _decade', 'THERAPEUTIC_PROCEDURE: c ological _surgical _therapy', 'BIOLOGICAL_STRUCTURE: rett s _oesophagus', 'DISEASE_DISORDER: _adenocarcinoma', 'SIGN_SYMPTOM: to path ologic _progression', 'DETAILED_DESCRIPTION: grade', 'SIGN_SYMPTOM: grade _dysplasia', 'SIGN_SYMPTOM: gd', 'DISEASE_DISORDER: _adenocarcinoma', 'DISEASE_DISORDER: ac', 'BIOLOGICAL_STRUCTURE: rett s _oesophagus', 'DISEASE_DISORDER: esophageal _cancer', 'DIAGNOSTIC_PROCEDURE: _organic _compound _voc', 'DIAGNOSTIC_PROCEDURE: _breath', 'DETAILED_DESCRIPTION: _stage', 'DISEASE_DISORDER: _adenocarcinoma', 'DETAILED_DESCRIPTION: grade', 'DISEASE_DISORDER: plastic', 'BIOLOGICAL_STRUCTURE: rett s _oesophagus', 'DETAILED_DESCRIPTION: _fasted', 'DETAILED_DESCRIPTION: _stage', 'DETAILED_DESCRIPTION: _validated _method _sample

_breath', 'DETAILED_DESCRIPTION: _breath _collecting _device _utilising _bag _breath _sample _collected _within _thermal _desorption _tube _mark es _international _l lan tris ant _uk _transferred _central _laboratory _analysis', 'DIAGNOSTIC_PROCEDURE: _chromatography _mass _spectrometry', 'DIAGNOSTIC_PROCEDURE: _transfer _reaction _time _flight _mass _spectrometry', 'DETAILED_DESCRIPTION: _protocol', 'SEVERITY: [SEP]']

Method6: Rostlab/prot_bert

Tokenizer: Rostlab/prot_bert

Status: Not displaying the results properly

Output:

Some weights of BertForTokenClassification were not initialized from the model checkpoint at Rostlab/prot_bert and are newly initialized: ['classifier.bias', 'classifier.weight']

You should probably TRAIN this model on a down-stream task to be able to use it for predictions and inference.

Asking to truncate to max_length but no maximum length is provided and the model has no predefined maximum length. Default to no truncation.

Processed Summary: na

NER Results: []

Processed Summary: primary objective determine clinical molecular subtypes differ expected result 15 time determine molecular information alters treatment plan perceived treating physician survey subject consented trial archival tissue primary tumor obtained stored tissue metastatic site also obtained physician asked preferred medication next two line treatment pam50 testing determine molecular subtypes determined primary metastatic tissue molecular subtype result primary tissue returned physician physician asked preferred medication next two line treatment number time medication change first second survey determined subject active participation last long consent process

NER Results: []

Processed Summary: protocol describes phase ii study involving patient stage iv adenocarcinoma lung treatment consist cyclophosphamide 300 mgm² given iv day 1 day 57 day 4 immunization intradermal vaccine injection 4 separate site bilateral upper arm bilateral upper thigh repeated every 14 day time 2 followed every 28 day time 3 day 4 18 32 60 88 116 decavac tetanus shot 05 cc intramuscular im given first vaccine atra 150 mgm2day oral three time daily tid dosing administered first fourth vaccine day 57 day 6163 patient achieving stable disease sd partial response pr complete response cr restaging initial 6 vaccine receive additional vaccine every 3 month disease progression vaccine consist gmcd40l bystander cell admixed equivalent number 2 allogeneic tumor cell line 7 day window study related exam test procedure

NER Results: []

Model7: bioformers/bioformer-8L

Status:Not working

Model8: bioformers/bioformer-16L

Status:Not Working

Model9: monologg/biobert_v1.1_pubmed

Status:Not working properly

Output:

Processed Summary: cancer survivor registry breast cancer map mind affect physical project first registry kind look emotional social need individual diagnosed breast cancer track need changed throughout cancer journey data raise awareness help develop program address need breast cancer survivor finding registry disseminated online www.cancersupport.communityorgregistryindexreport.2017

NER Results: []

Processed Summary: primary objective identification one lesion suspicious prostate cancer using novel mri protocol identified transrectal ultrasound trus alone determine lesion identified mri demonstrate clinically significant prostate cancer based pathologic finding ie gleason 7 percentage core involved cancer 50 secondary objective average time mri scan per patient ii correlation lesion mri radical prostatectomy specimen iii determine whether mri 3 dimensional 3d t2 halffourier acquired single turbo spinecho haste sampling perfection application optimized contrast using different flip angle evolution space protocol provide improved rate prostate cancer detection iv yield additional clinically significant prostate cancer diagnosis based mri targeted lesion biopsy v rate benign pathology identified mri ie false positive vi compare cost associated use mri trus biopsy alone outline participant undergo pelvic mri within 12 week patient undergo scheduled prostate biopsy

NER Results: []

Model10: emilyalsentzer/Bio_ClinicalBERT

Status:Not Working

Model11: allenai/scibert_scivocab_uncased

Status:Not Working

Model12: allenai/scibert_scivocab_uncased

Status:Not Working

Model13: microsoft/BiomedNLP-PubMedBERT-base-uncased-abstract

Status:Not Working

Model14: Bloomberg/bluebert pubmed uncased L-12 H-768 A-12

Status:Not Working

Model15: bert-base-uncased

Status:partial working

Model16: microsoft/BiomedNLP-PubMedBERT-base-uncased-abstract

Status:Not Working

Model17: alvaroalon2/biobert_diseases_ner

Status: Working

Output:

Processed Summary: primary objective determine clinical molecular subtypes differ expected result 15 time determine molecular information alters treatment plan perceived treating physician survey subject consented trial archival tissue primary tumor obtained stored tissue metastatic site also obtained physician asked preferred medication next two line treatment pam50 testing determine molecular subtypes determined primary metastatic tissue molecular subtype result primary tissue returned physician physician asked preferred medication next two line treatment number time medication change first second survey determined subject active participation last long consent process

NER Results: ['DISEASE: tumor']

Processed Summary: protocol describes phase ii study involving patient stage iv adenocarcinoma lung treatment consist cyclophosphamide 300 mgm² given iv day 1 day 57 day 4 immunization intradermal vaccine injection 4 separate site bilateral upper arm bilateral upper thigh repeated every 14 day time 2 followed every 28 day time 3 day 4 18 32 60 88 116 decavac tetanus shot 05 cc intramuscular im given first vaccine atra 150 mgm2day oral three time daily tid dosing administered first fourth vaccine day 57 day 6163 patient achieving stable disease sd partial response pr complete response cr restaging initial 6 vaccine receive additional vaccine every 3 month disease progression vaccine consist gmcd40l bystander cell admixed equivalent number 2 allogeneic tumor cell line 7 day window study related exam test procedure

NER Results: ['DISEASE: ##eno ##car ##cin ##oma', 'DISEASE: te', 'DISEASE: ##tan', 'DISEASE: tumor']

Processed Summary: prospective longitudinal interventional study bluestar genomics early detection pancreatic cancer test test ordered result returned siteinvestigators study planned enroll 10000 male female 50 year age newly diagnosed type ii diabetes within 90 day prior enrollment study population target 70 subject 65 year old 53 male target enroll least 50 subject bmi 32 subject undergo 3 blood draw time enrollment t0 6 month t1 12 month t2 diabetes diagnosis test result detected mri imaging performed ass pancreas mri imaging study result abnormal subject referred back enrolling clinician additional diagnostic work part routine healthcare 24 month diabetes diagnosis review electronic medical record emr performed subject detected test result study also include bluestar genomics test detected imaging arm negative control imaging arm time point subject included negative imaging arm prespecified randomly selected among bluestar genomics detected case gender ratio age matched bluestar genomics detected undergo mri imaging

NER Results: ['DISEASE: ##cre ##atic cancer', 'DISEASE: ii diabetes', 'DISEASE: diabetes', 'D

Processed Summary: even tumor sample collected participant obligation participate vaccine study participant regularly planned surgery described surgeon surgery tumor sample collected collect tumor needed could otherwise thrown away tumor sample frozen placed storage two year

NER Results: ['DISEASE: tumor', 'DISEASE: tumor', 'DISEASE: tumor', 'DISEASE: tumor']

Processed Summary: prostate cancer recently surpassed lung cancer become common cancer american men estimated number new prostate cancer case 2005 expected 232090 198000 2002 prostate cancer represents 29 new cancer diagnosis men comparable incidence breast cancer woman prostate cancer continues disproportionately affect minority men patient early localized prostate cancer number treatment option including surgical removal prostate radiation therapy external beam implantation radioactive seed hormonal therapy cryoablation expectant monitoring watchful waiting currently available treatment localized prostate cancer carry risk number iatrogenic symptom including urinary incontinence ed others vary depending treatment received need symptom management education greater men lower health literacy health literacy ability individual capacity obtain process understand health information service needed make appropriate health decision shown strongly related health status health outcome person lower health literacy skill significantly le likely take preventive action improve health health literacy particular concern men prostate cancer africanamerican men group significantly higher prevalence prostate cancer overrepresented among lower literacy men prostate cancer3 study proposed develop evaluate randomized controlled trial rct empiricallyderived symptom

management intervention lower literacy men prostate cancer intervention based biopsychosocial model prostate cancer symptom management developed general ucsf symptom management model smm banduras selfefficacy theory efficacy intervention evaluated 200 men localized prostate cancer randomized receive either new tailored symptom management program usual care participant intervention control group receive booklet coping cancer available patient treated ucsf comprehensive cancer center intervention group participant also receive new symptom management intervention tailored individual symptom profile group followed 6 month enrollment assessment enrollment 5 additional timepoints proposed research project includes following specific aim conduct rct evaluate tailored symptom management intervention targeted lower literacy men localized prostate cancer investigator hypothesize men receive tailored symptom management intervention n100 report significantly le symptom distress 6month followup men control condition n100 symptom distress measured expanded prostate cancer index composite epic urinary bother sexual bother subscales intervention control group stratified literacy level type prostate cancer treatment complete planned training experience include course responsible conduct research symptom management cancer care cancer prevention cancer epidemiology clinical research diverse community longitudinal analysis method provide knowledge skill necessary successfully conduct rct assemble group key personnel expertise necessary guide training experience rct primary mentor leslie schover phd expert cancer symptom management key personnel include stephen i lepore phd principal investigator previous prostate cancer psychosocial intervention study brian j mile md expert prostate cancer treatment robert morgan phd senior methodologist

NER Results: ['DISEASE: pro', 'DISEASE: cancer', 'DISEASE: cancer', 'DISEASE: ##state cancer', 'DISEASE: pro', 'DISEASE: cancer', 'DISEASE: pro', 'DISEASE: cancer', 'DISEASE: ##state cancer', 'DISEASE: ##state cancer', 'DISEASE: cancer', 'DISEASE: cancer', 'DISEASE: ##state cancer', 'DISEASE: cancer', 'DISEAS

Processed Summary: na

NER Results: []

Processed Summary: trial investigatorinitiated singlecenter openlabel singlearm exploratory study mrna neoantigen tumor vaccine treatment advanced gastric cancer including two phase dose escalation dose expansion evaluate safety tolerability neoantigen tumor vaccine subject advanced gastric cancer conducting dose escalation trial subject diagnosed advanced gastric cancer preliminarily evaluate efficacy neoantigen tumor vaccine subject advanced gastric cancer according characteristic safety efficacy data dose escalation phase dose expansion performed intended clinical dose based investigator judgment treatment performed combination pd111 evaluate efficacy safety profile neoantigen tumor vaccine specific dose dose escalation phase dose expansion phase include screening period week 4 week 2 baseline period week 1 day 1 treatment period day 1 week 8 16 followup period subject signed provided formal informed consent entered screening period treatment period included initial treatment period day 1 week 8 enhanced treatment period week 12 week 16 investigator determined whether enter enhanced treatment period based comprehensive judgment subject efficacy safety compliance factor week 8 week 12 dose escalation phase 18 subject expected enrolled 100 ug 200 ug 400 ug 6 subject 100 µg 6 subject 200 µg 6 subject 400 µg low dose group enrolled first next dose group started number subject met requirement subject withdrew early low dose group given priority investigator choose optimal clinical dose dose expansion one dose group multiple dose group pd111 drug used parallel confirm efficacy safety neoantigen tumor vaccine 18 subject usage dosage pd111 aligned package insert

NER Results: ['DISEASE: tumor', 'DISEASE: ##tric cancer', 'DISEASE: tumor', 'DISEASE: ##tric cancer', 'DISEASE: tumor', 'DISEASE: tumor',

Processed Summary: primary objective goal conduct randomized controlled trial determine impact visual presentation context radiation oncologist discussion patient consultation patient satisfaction end consultation

visit end treatment anxiety start treatment decision regret following treatment perception side effect following treatment note attending radiation oncologist responsible reviewing powerpoint presentation patient taking time answer question patient outline patient randomized 1 2 arm arm standard education patient receive standard prostate cancer radiation oncology consultation arm b visual enhanced education patient receive visually enhanced prostate cancer educational powerpoint presentation including prostate anatomy pathologic result surgical option radiation therapy prognosis pictograph radiation oncology consultation

NER Results: ['DISEASE: ##state cancer', 'DISEASE: ##state cancer']

Model 18: